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Is Your Boss Underpaid?

October 6, 1958

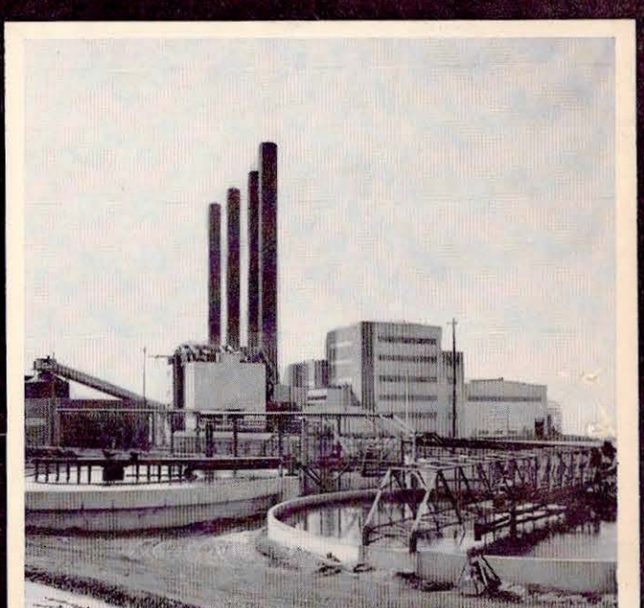
RAILWAY AGE *weekly*

New system speeds waybills on WM ore

Start-to-finish mechanization speeds traffic, cuts errors

110-mile pipeline moves coal in Ohio

New line running at capacity; plans for 1,200,000 tons a year



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Roy Pinney photo taken at Cypress Gardens, Florida

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Western Maryland Adds New Hopper Cars

Five hundred new triple-hopper cars have been added to the Western Maryland fleet and are now in regular service. They have already proved their value to WM's progressive management, and to its shippers as well.

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Cubic capacity, level full	2700 cu ft
With 10-in. average heap	3030 cu ft
Length inside	40 ft 7¾ in.
Width inside	9 ft 7¾ in.
Height, rail to top of side	11 ft
Weight, empty	52,500 lb

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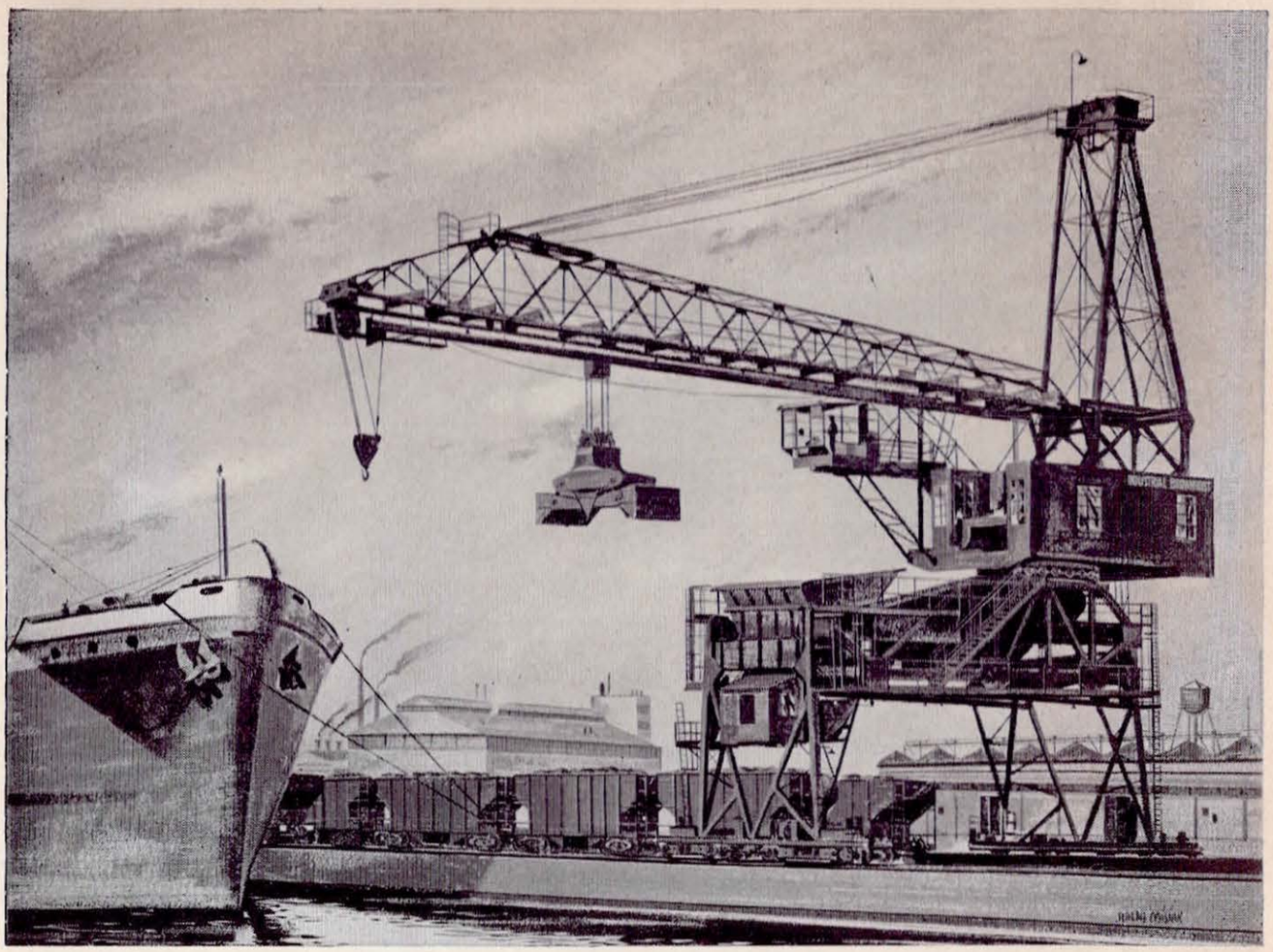

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The latest type combination boat-unloading crane being engineered and built by Industrial Brownhoist in Bay City, Michigan will substantially improve facilities in the Port of Galveston's 1957 expansion program.

This big, fast-working Brownhoist crane loads or unloads bulk materials from ship-to-cars or cars-to-ship at the remarkable rate of 540 tons per hour! Equipped with 75 foot boom, on which travel both a hook and a Brownhoist-made, 80 cubic foot flush link-type bucket. The entire unit straddles three railroad car tracks located on the pier.

In addition to boat unloading equipment and material handling bridges, Industrial Brownhoist manufactures Diesel-Electric locomotive cranes from 25 to 90 tons, and railroad cranes up to 250 ton capacities. If your firm can profit from reliable, high-speed, high-capacity material-handling equipment, write for new general Catalog No. 562.

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RAILWAY AGE *weekly* October 6, 1958 • Vol. 145, No. 14

Week at a Glance

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Seaboard, ACL consider merger ..... p. 9

An alliance between the two big southeastern roads could lead to "tangible economies and greater efficiency," their presidents believe. If achieved, the merger would create the eighth largest railroad in the nation in terms of operating revenues.

Bad order ratio 'serious'—Freas p.10

ICC Chairman finds the increase in unserviceable freight cars "alarming," warns of impending car shortage in address before the American Short Line Railroad Association.

Is your boss underpaid? p.12

Compensation of chief executives of line-haul railroads is below the average for top officers in other industries. Railroad executive earnings, however, fluctuate less in relationship to changes in corporate income than do executive earnings in most other industries.

Pipeline moves coal in Ohio p.20

The state's coal-hauling railroads are being shut out of a market that receives about 1½ million tons of the fuel annually. They are being shut out by a 110-mile steel tube through which moves a mixture of coal and water.

New system speeds waybills on WM ore p.26

The system, fully mechanized, virtually eliminates chance of error. Delivery of ore has been speeded up, too.

The Action Page—How to fool Mr. Khrushchev p.42

The demise of U. S. railroad passenger service—which the ICC's Mr. Hosmer thinks will happen within ten years—would please the Kremlin. But the service has a lot of built-in vitality. Railroaders and their friends must work to eliminate the factors responsible for the present state of railroad passenger business.

Short and Significant

The first of the big gas turbine-electrics . . .

is now in experimental service on Union Pacific, handling freight runs between Omaha and Ogden, Utah. UP has 30 of the 8,500-hp units on order with General Electric.

Arkansas railroads have won the first round . . .

in their fight for repeal of the state's full crew law. The Arkansas Supreme Court last week approved the ballot title on the carriers' petition for an initiated act to repeal the statute. At the same time, the court found title defective on a union-backed

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Immediate Savings are yours with Rust-Oleum, because Rust-Oleum 769 Damp-Proof Red Primer may be applied directly over sound rusted surfaces after simple scraping and wirebrushing to remove rust scale and loose rust. Specially-processed fish oil vehicle *penetrates* rust to bare metal, as *proved* by leading technologists. This usually eliminates sandblasting, flame-cleaning, and other costly surface preparations, enabling one man to do the work of two or more.

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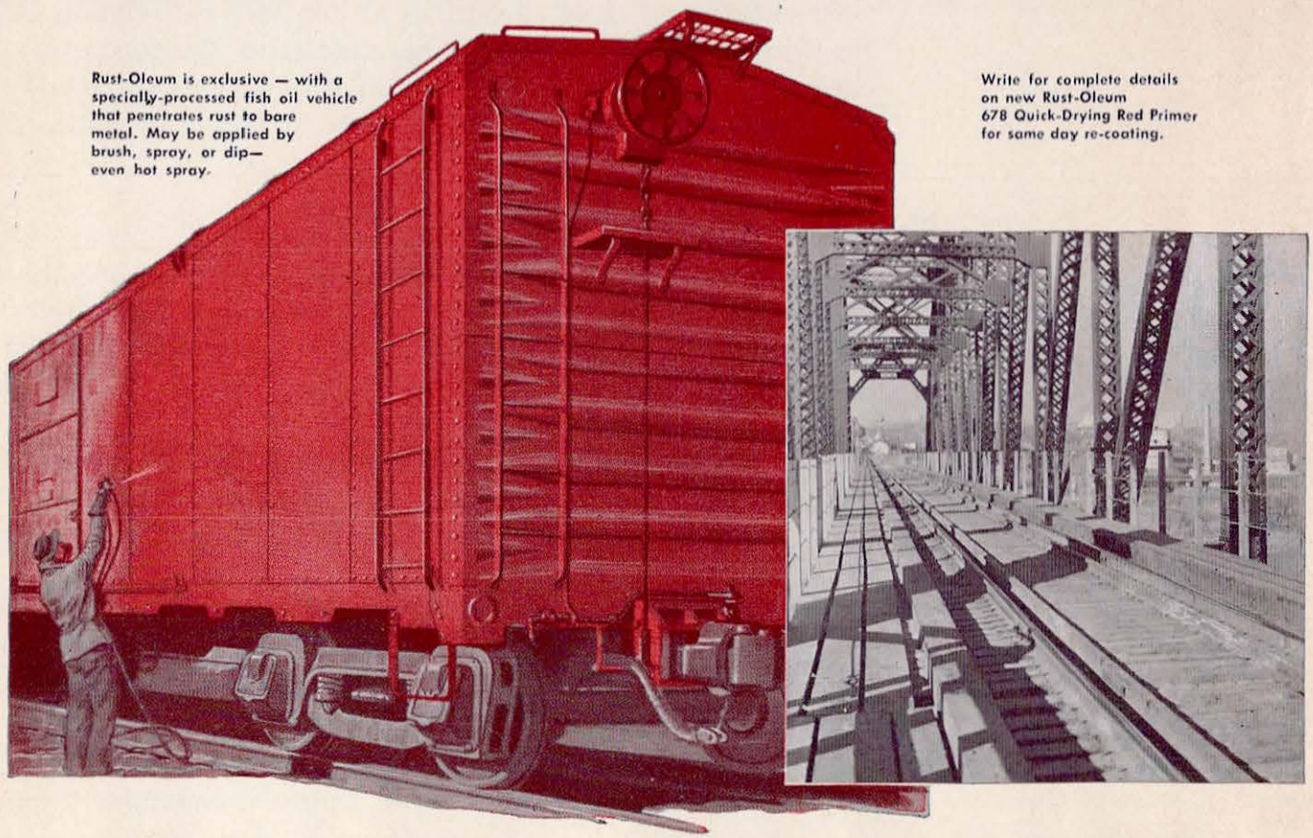
Write for complete details on new Rust-Oleum 678 Quick-Drying Red Primer for same day re-coating.



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Week at a Glance CONT.

Current Statistics

Operating revenues, seven months	
1958	$5,328,904,917
1957	6,115,399,181
Operating expenses, seven months	
1958	4,352,973,447
1957	4,812,497,958
Taxes, seven months	
1958	502,862,761
1957	627,828,840
Net railway operating income, seven months	
1958	299,720,126
1957	519,061,429
Net income estimated seven months	
1958	200,000,000
1957	397,000,000
Average price 20 railroad stocks	
Sept. 30, 1958	96.15
Oct. 1, 1957	79.65
Carloadings revenue freight	
Thirty-eight wks., 1958	21,479,297
Thirty-eight wks., 1957	26,396,972
Average daily freight car surplus	
Wk. ended Sept. 27, 1958	25,543
Wk. ended Sept. 28, 1957	19,682
Average daily freight car shortage	
Wk. ended Sept. 27, 1958	3,688
Wk. ended Sept. 28, 1957	1,485
Freight cars on order	
September 1, 1958	25,611
September 1, 1957	79,258
Freight cars delivered	
Eight months, 1958	32,533
Eight months, 1957	67,894

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POSTMASTER—SEND FORM 3579 to EMMETT ST., BRISTOL, CONN.

proposal to write full crew legislation into the state constitution. Thus only the full crew repealer will go before the voters Nov. 5. Also rejected by the court: title on a "freedom-to-hire" constitutional amendment proposal backed by management; and on a second labor-supported amendment to require installation of flasher lights and gates at all grade crossings.

Southern Pacific wants to discontinue service . . .

at 45 points on its Los Angeles-Tucumcari, N. Mex., route, now served by two "Imperial" trains. By discontinuing stops at 45 towns in California, Arizona and New Mexico, SP told the ICC, it can cut a $2,360,000-a-year-loss now incurred by the two trains, also knock five hours off the current 32-hour schedule. The railroad asked for authority to drop the towns under the 1958 Transportation Act, which gives the ICC broader power over discontinuance of service.

A 5 per cent hike in passenger fares . . .

is being sought by eight New England railroads, effective Dec. 1. The proposed increase, which would apply to both coach and first class fares, was filed with the ICC by the Bangor & Aroostook, Boston & Maine, Belfast & Moosehead Lake, Central of Vermont, Canadian Pacific for lines in Maine, Grand Trunk Railway System for lines in Maine, Maine Central, and the New Haven. New York Central and Pennsylvania have indicated they will seek a 5 per cent coach fare increase, and a 15 per cent hike in first class fares, effective Nov. 1.

Perishable traffic will move East . . .

on expedited freight schedules beginning Nov. 1. The speedup, general among western lines, will cut a day from transit time, provide fifth-morning delivery at Chicago and St. Louis. Perishables are the major items involved, although certain of the faster schedules will also apply to merchandise. Western roads inaugurated one-day-faster westbound freight schedules earlier this year. The goal, eastbound and westbound: to meet trucker competition.

The one-fare system . . .

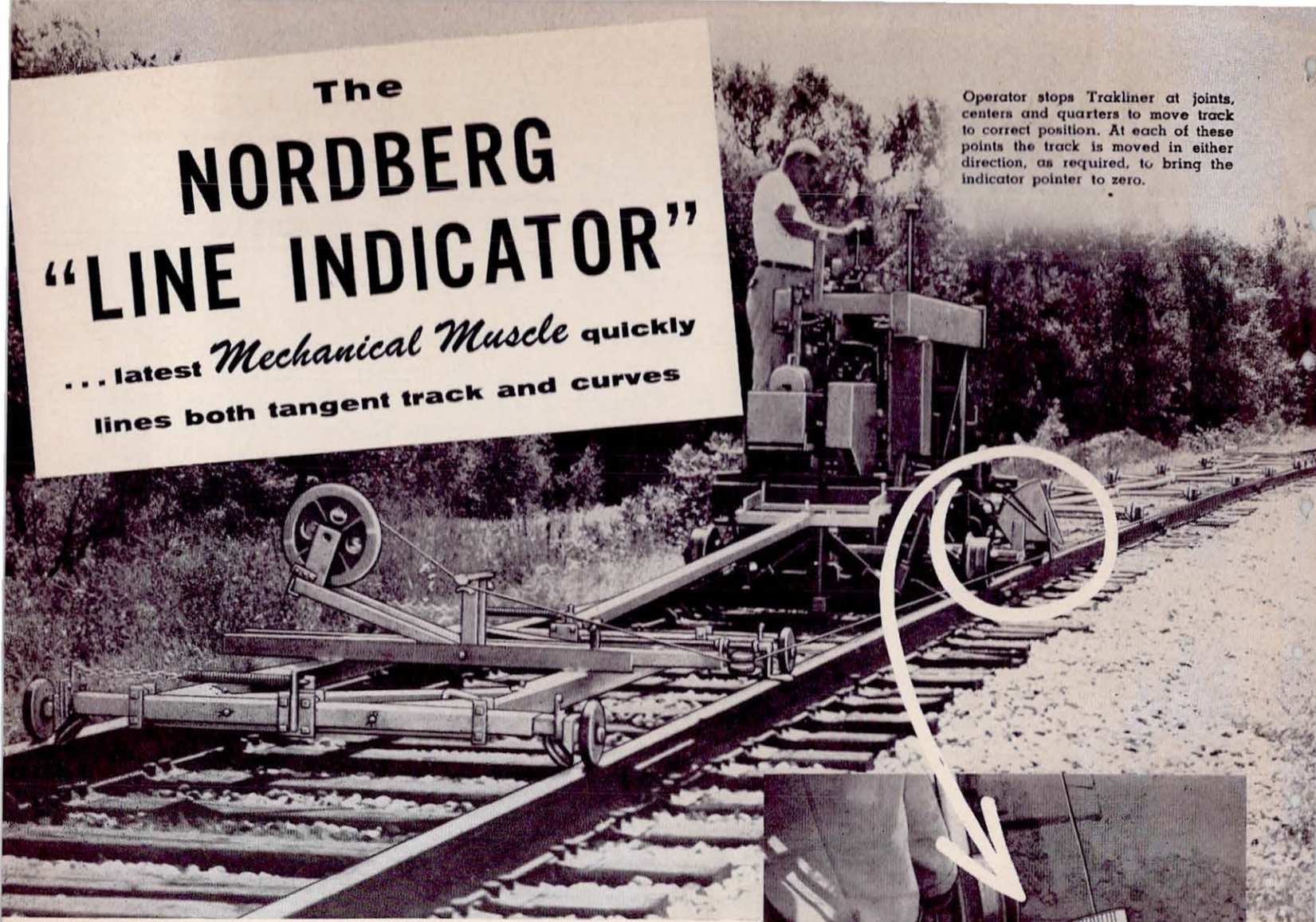
for coach and sleeping car travel has won another convert in the West. Texas & Pacific will honor coach tickets in conventional sleeping cars on the "Westerner" (Dallas-El Paso) and the "Louisiana Eagle" (Fort Worth-New Orleans). It's billed as a six-month experiment. Space charges are unchanged; and the one-fare arrangement doesn't apply in lightweight Pullmans also carried on the two trains.

T&P thus joins MoPac and KCS . . .

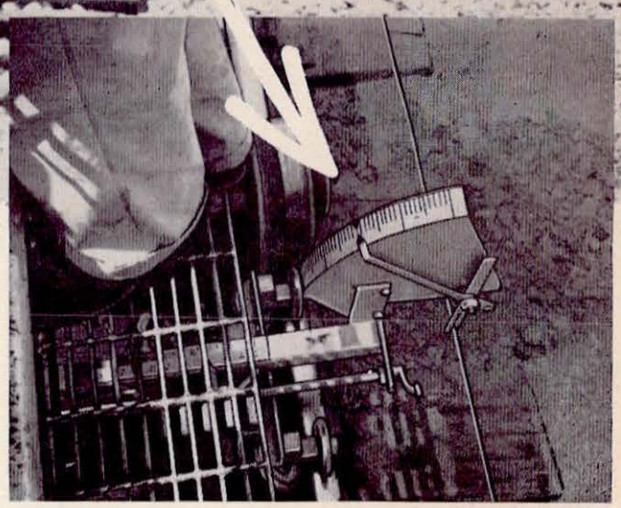
in moving over to the one-fare plan. And the idea may spread. Reports making the rounds now indicate there's a good possibility other western road may try it. Action—if any—could come late this month.

The NORDBERG "LINE INDICATOR"

...latest *Mechanical Muscle* quickly lines both tangent track and curves



Operator stops Trakliner at joints, centers and quarters to move track to correct position. At each of these points the track is moved in either direction, as required, to bring the indicator pointer to zero.



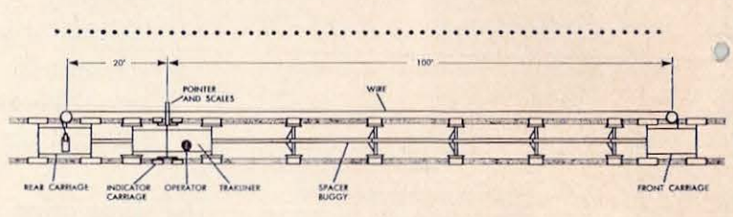
The single strand of wire used in the "Line Indicator" is carried in a fixed position and passes through the indicator at the Trakliner as shown above. If the track is out of line, the amount of deviation is shown by the pointer. Prior to lining, the reference wire is accurately adjusted so it is equally distant from the gage side of the line rail at the front and rear buggies, and at the pointer carriage. *Note arrangement of unit in diagram below.*

Quick, lower cost lining of curves and tangent track is now possible with the Nordberg *Line Indicator*. Using the well-known Trakliner® as a central unit, this new "Mechanical Muscle" does the complete job of sighting and lining track.

Sighting is accomplished with a 120-ft. length of wire. This wire is mounted on a moving assembly consisting of two 4-wheeled buggies which are maintained at proper distance from the Trakliner by lengths of tubing. One of the buggies is located 100′ ahead of the Trakliner and the other 20′ behind it. An indicator, mounted on a small carriage, is placed directly beneath the Trakliner in full view of the operator. If the track is out of line in relation to the reference wire, the amount of deviation is shown by a pointer on the indicator. The Trakliner then makes the correction.

Under average conditions, the Nordberg *Line Indicator* and Trakliner will line a rail length of tangent track in two minutes or less. In lining curves, two "passes" around the curve are made. The first, to obtain original "ordinates" and the second, to line to the desired final ordinates. A recently ballasted, one-degree curve, 4900 feet long, was lined by this method in only four hours.

A Trakliner operator and a man to adjust the pointer scale are all the crew that is required . . . together they can easily remove the light-weight buggies and tubular sections, as well as the Trakliner, from the track.



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Seaboard, ACL Consider Merger

A team of consultants will explore the possibilities of a corporate marriage that would unite two long-time Dixie rivals—and create the eighth largest railroad network in the nation, in terms of operating revenues.

A "leak" in Wall Street forced a premature announcement last week that a pair of long-time Dixie rivals—the Seaboard Air Line and the Atlantic Coast Line—are considering merger.

Seaboard President John W. Smith and ACL President W. T. Rice confirmed the news in Washington, D. C., late Monday as rumors of a possible corporate marriage made the rounds in New York.

Actually, it will be some time before the banns are posted even if an alliance is

ACL's RICE

SEABOARD'S SMITH

finally decided upon. First, a team of independent consultants will have to be selected to explore the possibilities. Then the results of the exploratory study will have to be voted upon by the directors of the respective roads. It will be up to the stockholders, finally, to say "I do."

The initial announcement, however, noted that "preliminary consideration of a merger of the properties of Seaboard and Coast Line indicates that tangible economies and greater efficiency may be achieved, with resulting benefits to the public."

The aim of a merger, the two presidents said, would be "to gain the advantages of reduced operating costs through the coordination of facilities at common points where duplication exists and the more efficient utilization of motive power, cars and other facilities."

They noted that during the recent session of Congress, when railroad problems got their most thorough airing in years, emphasis had been placed on the desirability of tightening the nation's rail networks through mergers.

The two railroads now maintain separate facilities in several southern cities, including Norfolk, Va., Atlanta, Ga., Columbia, S. C., Savannah, Ga., and Jacksonville, Tampa, St. Petersburg and Sarasota, Fla.

The Seaboard today operates some 4,150 route miles while the ACL operates around 5,300. A merger could create the eighth largest railroad network in the country, in terms of operating revenues. For the first half of 1958 the Coast Line had operating revenues of $76,482,771; the Seaboard, $78,116,068.

With the Louisville & Nashville thrown in (Coast Line owns around one-third of L&N stock) the resulting network would be the fifth largest in the U. S.

A Seaboard spokesman noted that both roads are operating well in the black. Last year the ACL earned $10,388,000 ($4.20 a common share) on gross revenues of $163,340,000. The Seaboard earned $18,509,148 ($3.85 a capital share) on gross revenues of $163,119,729 in 1957. Coast Line's current assets as of June 30 were $45,058,845. Seaboard's current assets at June 30 came to $39,276,598.

On Wall Street, the stock of both railroads rose several points within a few hours after the merger study was announced.

Other Mergers—Where They Stand

The Seaboard and ACL are the latest to succumb to what has been called "merger fever," but they are by no means alone. Other railroad mergers and consolidations in the news recently:

New York Central—Pennsylvania: Central President A. E. Perlman predicted last month that operating studies might be completed in time to put the merger before stockholders of both companies this year. Biggest current problem, he said, is settlement of financial details.

Great Northern—Northern Pacific—Chicago, Burlington & Quincy—Spokane, Portland & Seattle: Operating studies were completed a year ago; plan may be ready for submission to ICC later this year. Present plan leaves Burlington subsidiaries C&S and FW&D out of merger.

Delaware & Hudson—Delaware, Lackawanna & Western—Erie: Wyer, Dick & Co., transportation consultants, completed a favorable 21-month study of operational advantages of this merger this summer. Their report is being studied by a committee representing the three roads prior to submission to individual boards.

Chicago & North Western—Milwaukee: A study of the potential benefits of merging these two roads has been held in abeyance while C&NW Chairman Heineman continues his program of improvement. When the study was dropped, the Milwaukee left the door open for resumption at a future date if the C&NW should be interested.

Missouri Pacific—Texas & Pacific: Study committees recently recommended abandonment of merger plans on the grounds that end-to-end merger would not produce great economy. Existing joint operations are being extended as much as possible.

Bad Order Ratio 'Serious'—Freas

ICC Chairman tells Short Line Association that even a moderate business upturn would severely strain the freight car supply.

ICC Chairman Howard Freas last week called the freight car bad order ratio "definitely serious" and "alarming."

If something isn't done, he warned, a car shortage of serious proportions could develop as business continues to turn upward.

"For the past year the railroads have had little serious trouble with the freight car supply," Mr. Freas told the 45th annual meeting of the American Short Line Railroad Association in Savannah, Ga.

"Except for specialized equipment, Class 'A' box cars of high cubic capacity and wide-door cars of all types, the supply has been reasonably adequate. It may not be in the future.

"An alarming thing at this time is the heavy increase in unserviceable freight cars awaiting repairs.

"As of Aug. 1, 1956, Class I railways had an ownership of 1,783,188 freight cars and reported 80,625 or 4.5 per cent of their total ownership as bad order. These figures for Aug. 1, 1958, are 1,820,692 cars owned, with 144,113 cars, or 7.9 per cent, bad order.

"The trend is definitely serious and any moderate business recovery, which appears to be imminent, will place a severe strain on the available freight car supply. It has been estimated that even a 10 per cent increase above last year's loadings will result in one of the worst car shortages of recent years.

"Car supply problems affect all types of industry, causing shutdowns of plants and mines, and serious loss of revenue to the rail carriers."

Mr. Freas added: "Transportation is your business and livelihood and an adequate car supply is the lifeblood of sound transportation. It is distressing to read statements by railroad presidents to the effect that if traffic were suddenly restored to 1956 levels we would have the most serious car shortage the nation has ever experienced."

In his address, the ICC chairman recapitulated the legislative gains made by the railroads in 1958 and saw hope for further action in the Senate resolution calling for broader inquiry into transportation problems.

In another speech before the meeting, Thomas M. Healy, management member of the Railroad Retirement Board, termed it just common sense that "in behalf of the industry and its enrolled workers, a lengthy moratorium should be declared on any and all proposals to enlarge or extend benefits under the Railroad Retirement Act."

Watching Washington *with Walter Taft*

Mr. Taft is on vacation. During his absence, this column is being written by other members of the staff.

• **REPEAL OF THE EXCISE TAX** on passenger fares in 1959 is considered virtually certain by Senator George A. Smathers, chairman of the Senate Surface Transportation Subcommittee. He plans personally to renew the repeal effort—and is "confident that this can be accomplished."

ALSO DUE TO COME UP in the next session of Congress is the railroad construction reserve proposal, defeated this year; and an effort to reduce the period of tax writeoff on railroad capital improvements to 20 years from the present 40-year average.

• **ICC's DIVISION 2** has suspended, for further investigation, the sharply reduced rates on paint proposed by Eastern railroads to become effective October 1 (RA, Sept. 29 p. 22).

• **A FINAL DECISION** on the Hudson River ferry discontinuance case may be hastened by a move taken last week by the New York Central, Erie, and New York, Susquehanna and Western.

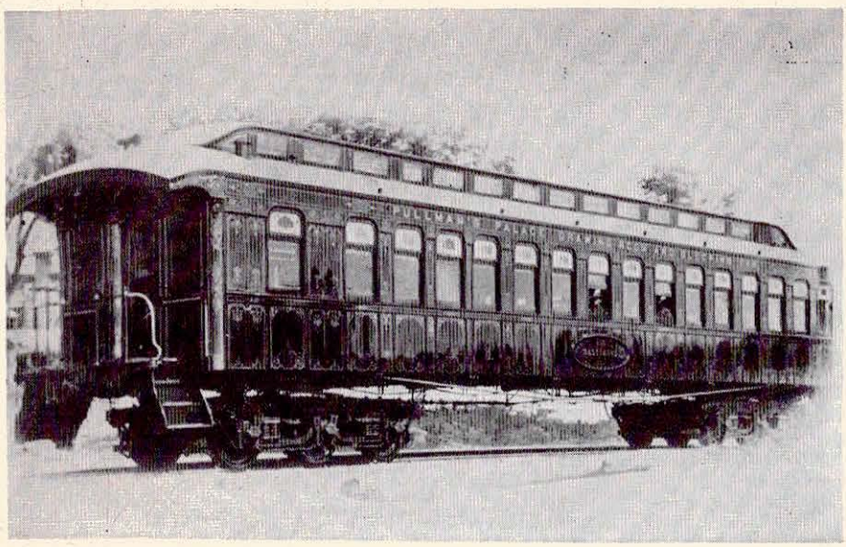
THEY ASKED Supreme Court Justice William J. Brennan Jr. to vacate a federal court injunction compelling them to continue operation of their Hudson River ferries. The injunction was granted pending a hearing—now set for Nov. 3—on the State of New Jersey's contention that the Transportation Act of 1958 (under authority of which the ICC permitted the discontinuance) is unconstitutional (RA, Sept. 22, p. 10).

WHATEVER THE OUTCOME of the New Jersey hearing, the losing side is apt to appeal the decision to the Supreme Court. Under present procedure an appeal to an individual justice usually precedes an appeal to the court as a whole—and the railroads apparently want to get this step out of the way as soon as possible in order to speed up the final decision.

• **LOUIS S. ROTHSCHILD,** under secretary of commerce for transportation since March, 1955, will step down from the post Oct. 24 in order, he says, "to devote my major attention to my personal and family affairs."

• **RUMORS OF A TRANSPORTATION DEPARTMENT** of Cabinet status are again making the rounds on Capitol Hill. Latest report is that the Bureau of the Budget is seriously weighing the proposal (advocated in the past by some rail leaders) for possible inclusion in the President's budget message to Congress next year.

• **A PER DIEM PUZZLER** awaits the U.S. Supreme Court. Both sides in the prolonged "per diem case" have appealed—shorthaul roads to clear up unresolved legal issues, long-haul roads to upset a Massachusetts district court order requiring the ICC to give more consideration to the problems of small roads which don't own many cars in setting car rental rates.



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100 Years of Railroad Cars

Compiled and Edited by Walter A. Lucas

This new volume provides authentic pictures and drawings of more than 200 railroad cars carefully selected from several editions of the *Car Builders' Cyclopedia, Railway Age* files and the author's private collection. It provides the hobbyist with authentic lore out of the past, not to be gained from any other single source. Some of the specimens in the book are not to be found except in their old, very scarce cyclopedia origins. Lavishly accompanied by photographs, the plans found in this book are specially designed so that the model builder can construct his own scale models from the full and complete information given, whether his interest lies in an early Davenport and Bridges Box Car or in one of the most recent streamlined dome cars.

Much of the information in this great new book is next to impossible for the average railroad man to find. The owner of 100 YEARS OF RAILROAD CARS will treasure it as the standard volume on the subject—perhaps never again will a book like this be published. It will certainly be one of the most complete books of railroad car plans and pictures ever published.

Here is the companion volume to the author's highly successful 100 YEARS OF STEAM LOCOMOTIVES, published late last year, and already becoming a collector's item. Model railroad builders, railroad enthusiasts, collectors of Americana, and transportation specialists will recognize in these two volumes an authoritative treatment of the motive power and rolling stock employed on American railroads over the past century.

Note the comprehensive coverage of 100 YEARS OF RAILROAD CARS as indicated by these section headings: *Freight Cars*—Box, Automobile, Ventilator, Gondola, Hopper, Ballast, Ore, Covered, Flat, Drop Center, Well Hole, Trailer, Rack, Refrigerator, Milk, Tank, Stock, Poultry, Service, Dump, Cranes, Snow Plow, Work, Caboose. *Passenger Cars*—Combine, Baggage, Express, Mail, Coach, Parlor, Chair, Dining, Buffet, Cafe, Kitchen, Sleeping, Dormitory, Observation, Dome, Business, Official, Private, Suburban, Motor, Electric, Diesel, Gasoline, Steam. *Trucks* — Four and Six Wheel Freight and Passenger.

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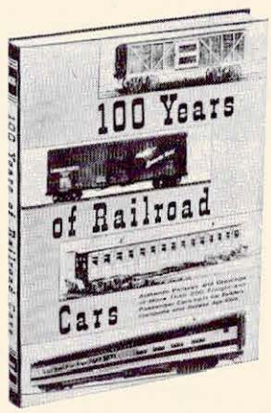

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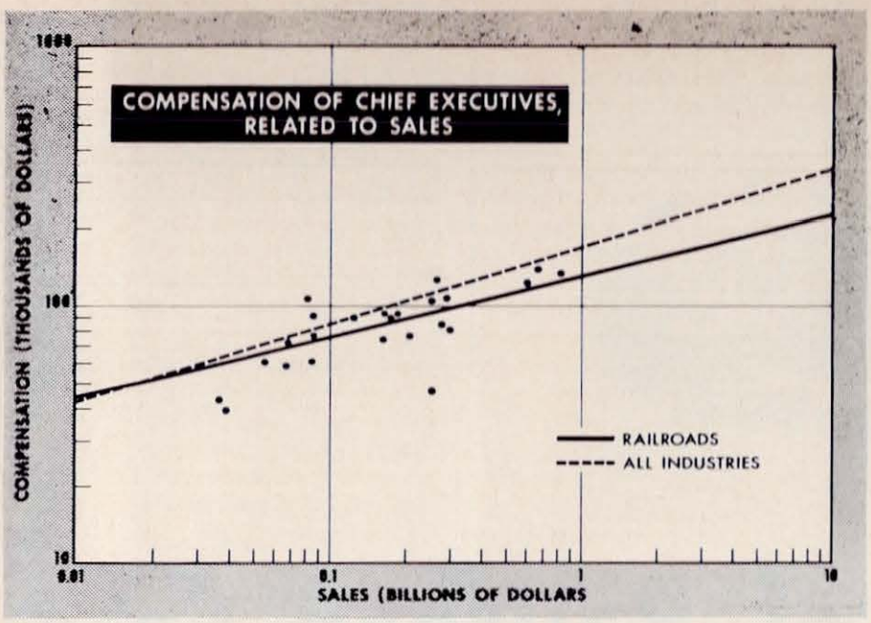
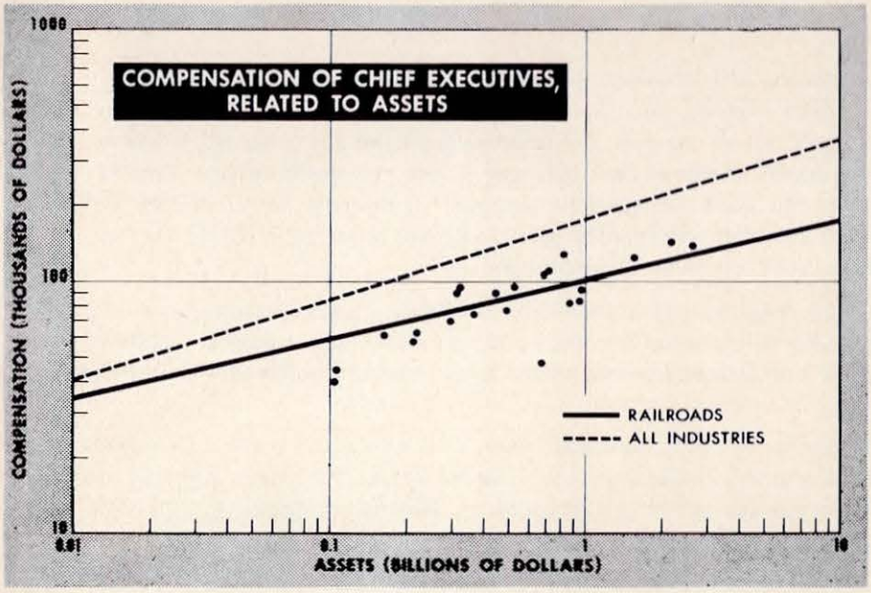
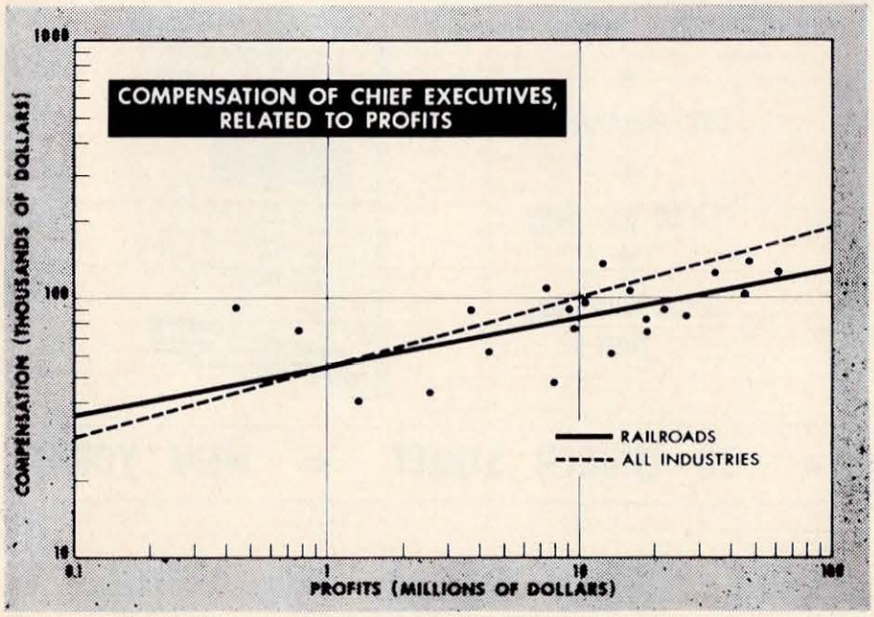
Are Railroad



Related to sales, average pay for railroad chief executives drops below the all-industry average—the gap widening as size of company increases. Each dot represents an individual railroad.



Related to assets, railroad pay to top executives runs well below the average for all industries. A factor in this, as with utilities generally, is the relatively high capital investment.



Related to profits, railroads in the lower bracket pay chief executives more than other industries do. Around $1 million, however, a lower trend is indicated. Note how widely dots vary in this category.

Chief Executives Underpaid?

The compensation of chief executives of line-haul railroads—ranging from around $15,000 to a high of $147,000 in 1957, according to ICC figures—is below the average for top officers in other industries.

Comparative figures for 18 industries have been compiled by the management consulting firm, McKinsey & Co. An analysis of the figures appears in the September-October Harvard Business Review, but specific figures pertaining to railroads were obtained by Railway Age.

Compensation, as used here, includes salary, bonus and deferred compensation. In considering these figures, however, it should be noted that they are averages and thus do nothing more than indicate a general condition.

The three scatter diagrams (facing page), illustrate the basic situation: Related to total sales, assets, or profits, railroad chief executives lag in total compensation behind the average for other kinds of business. Only when compensation is related to profits do railroad executives run briefly ahead of the other-industry category. And this is within companies with profit of $1 million or less.

Table 1 compares chief-executive compensation at varying sales levels—$30 million, $100 million, $400 million. In these categories, railroads rank 14th, 16th and 18th, respectively.

The level of top-executive compensation is important in more ways than one. From a company standpoint, the amount the president gets automatically establishes a lid on the earnings of subordinate officers. To railroads this means one thing: If the chief executive receives less than his counterpart elsewhere, so also do the number two, three, and four men in the organization.

Railroads Lag Behind

Actually, according to the McKinsey figures, railroads today lag behind other industries by a somewhat wider margin at these subordinate levels.

Figures on the 18 industries surveyed by McKinsey show the second man in individual companies averages 69 per cent of what his chief executive receives; the third man, 57 per cent; the fourth man, 52 per cent.

On railroads, the second man averages 59 per cent; the third man, 52 per cent, the fourth man, 50 per cent.

All industries, including railroads, offer various forms of compensation in addition to straight salary. These "extras" range from pension programs (in which railroads outdo other industry by a slight margin), to stock options, profit sharing trusts, deferred contingent compensation and consultative contracts. Railroads use "extra" programs, however, less than other industries. This means that the lower railroad salary averages are seldom offset by any other forms of financial remuneration.

On the plus side of the railroad picture, executive earnings react less to changes in corporate income than do executive earnings in most other industries. Railroad profits in 1957, for example, were off 16.5 per cent—a much sharper drop than the average 3.2 per cent experienced in other industries surveyed. Revenues, too, posted a smaller increase—less than 1 per cent, compared with 5.3 per cent in 642 companies in other fields.

Against this background, railroad chief executives received 3.1 per cent more compensation in 1957; their counterparts elsewhere receiving increases averaging only 1 per cent.

Non-supervisory personnel in the railroad industry do better than top executives, when compared with other industry. The carriers pay their non-supervisory people more, a fact pointed up in Table 2.

Figures therein, based on 1957 data from the Bureau of Labor Statistics, show that annual earnings for railroad employees ranked seventh in a group of 18 industries.

Table 1

Compensation of Chief Executives

Industry	Net Sales 30 Million	100 Million	400 Million
Aircraft Manufacturing	$50,000	$74,000	$119,000
Automotive Parts	62,000	90,000	139,000
Building Materials	63,000	96,000	160,000
Chemicals	68,000	99,000	152,000
Department Stores	66,000	97,000	153,000
Electrical Equipment	74,000	91,000	118,000
Food and Beverages	43,000	65,000	104,000
Heavy Machinery	58,000	86,000	131,000
Light Machinery	67,000	94,000	138,000
Nonferrous Metals	61,000	96,000	162,000
Paper and Paperboard	56,000	82,000	130,000
Petroleum and Natural Gas	65,000	87,000	122,000
Public Utilities	48,000	75,000	119,000
Railroads	**56,000**	**74,000**	**103,000**
Retail Chains	52,000	72,000	104,000
Steel and Iron	73,000	108,000	170,000
Textiles	65,000	90,000	131,000
Tobacco	74,000	102,000	150,000

Table 2

Average Annual Earnings

(Non-Supervisory Personnel)

Industry	
Petroleum and Natural Gas	$5,657
Steel and Iron	5,429
Automotive Parts	5,252
Nonferrous Metals	5,147
Aircraft Manufacturing	5,044
Public Utilities	4,968
Railroads	4,912
Machinery (Heavy and Light)	4,904
Rubber	4,772
Chemicals	4,744
Paper	4,487
Building Materials	4,318
Electrical Equipment	4,306
Food and Beverages	4,065
Retail Chains	3,269
Tobacco	3,063
Textiles	3,034
Department Stores	2,639

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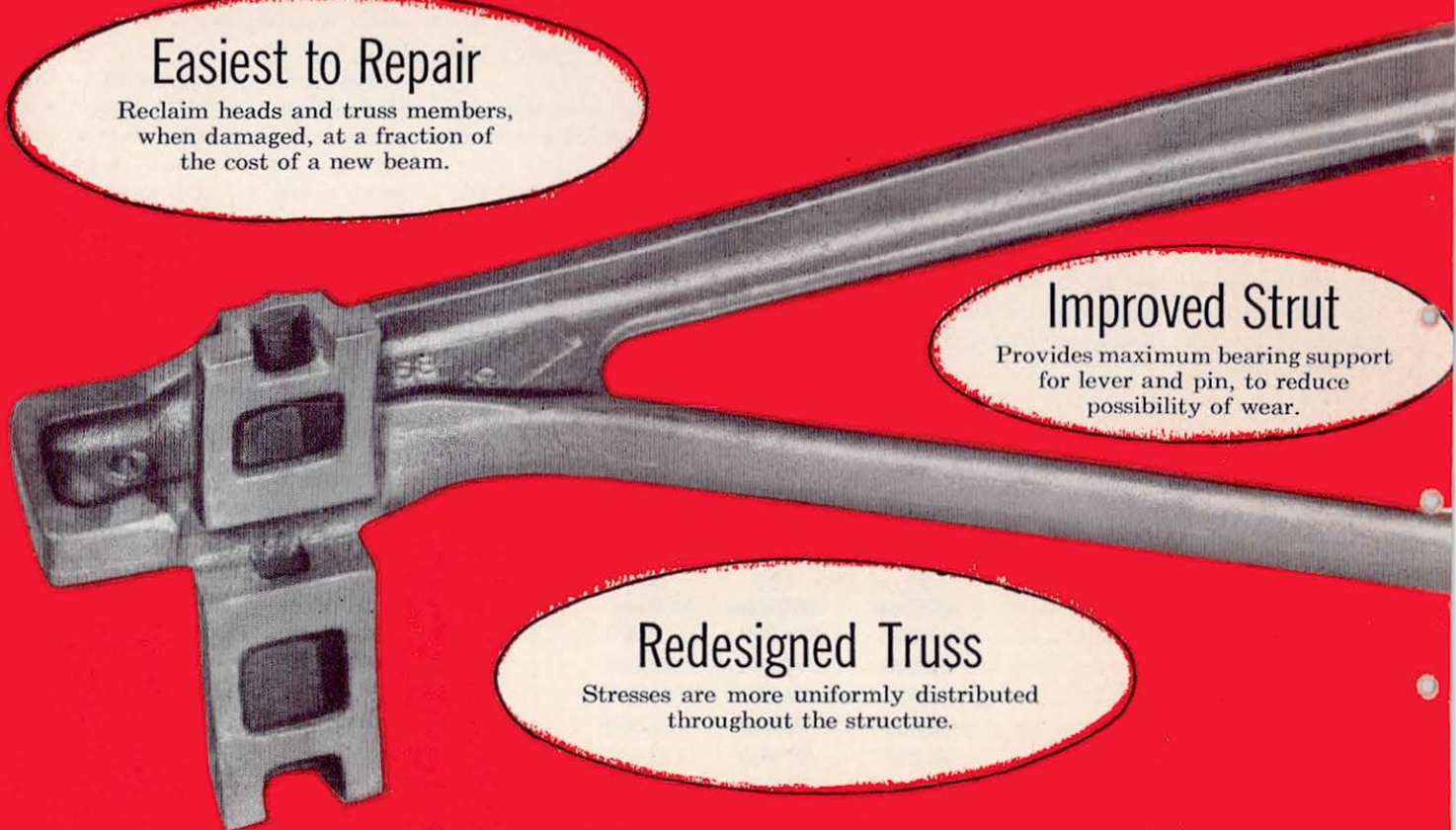

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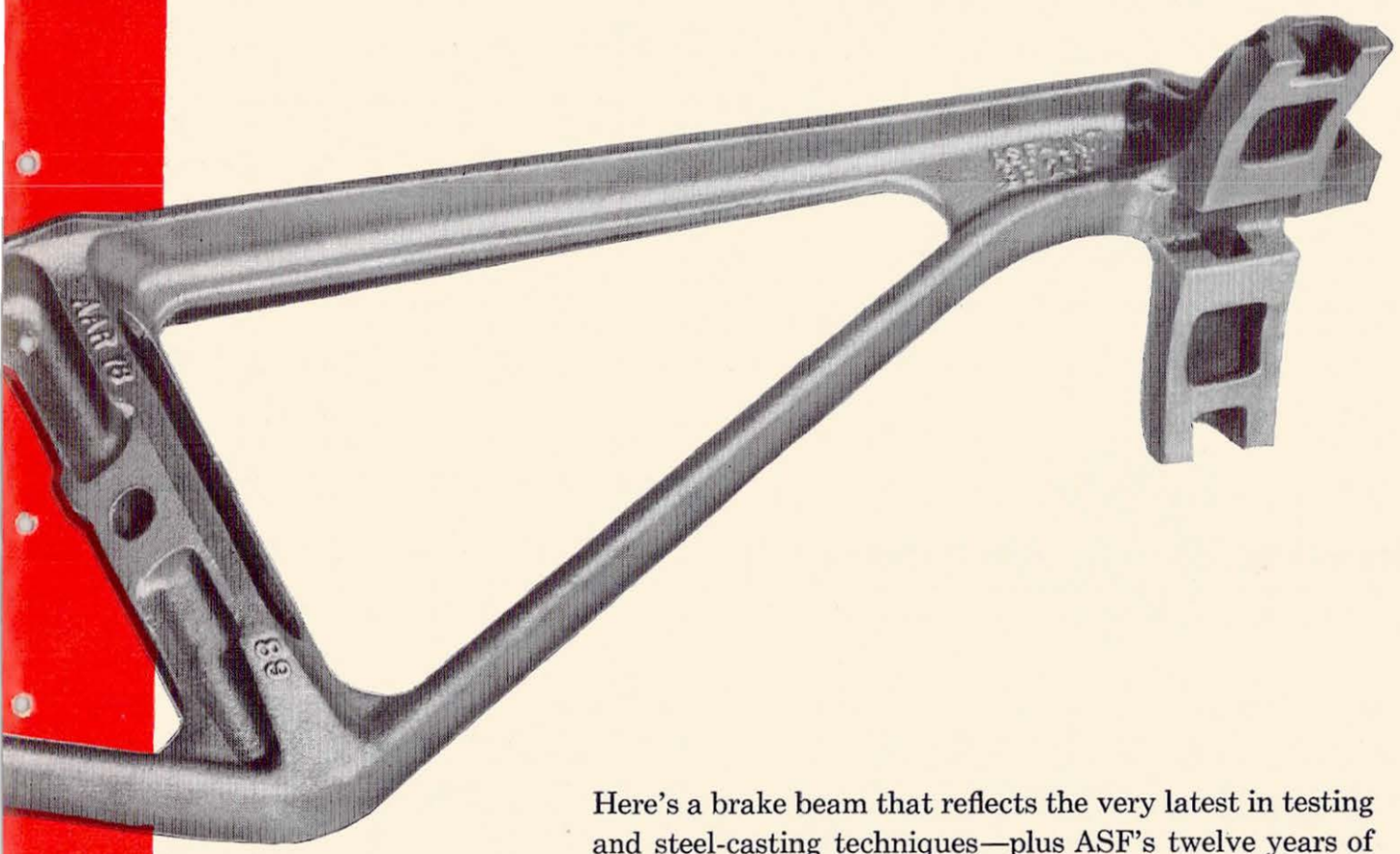

Here's a brake beam that reflects the very latest in testing and steel-casting techniques—plus ASF's twelve years of service experience with this type of beam. Like its predecessor, this new beam is built to stay on the car and out of the scrap pile . . . except that the new design will give you even *better* performance.

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Railroads Challenge Iowa Rate Order

Can a railroad be forced to forego a compensatory rate, and a chance to compete, merely because the proposed rate undercuts motor carrier competition? Seven railroads in Iowa don't think so. They're challenging such a regulatory order in the state courts.

The seven—Rock Island, Burlington, Chicago Great Western, Chicago & North Western, Milwaukee, Illinois Central and Minneapolis & St. Louis—filed suit against the Iowa Commerce Commission and its members in Polk county, Iowa. They're asking that the court set aside the commission order as (a) exercise of a power to prescribe minimum rates which is not vested in the commission; (b) unsupported by evidence; and (c) a violation of the Iowa Constitution.

This specific rate case dates back to May 24, 1957, when the railroad's agent filed Freight Tariff 442-B with the ICC and the Iowa commission. The tariff covered a reduced schedule of local and joint rates on petroleum oil and its products in carload quantities.

Certain competitors—transporters of petroleum products by tank truck—protested and asked the Iowa commission to suspend the effective date and prohibit rail carriers from making such rates effective for intrastate shipments. "No shipper or receiver of such shipments," the railroads note, "joined in such protests."

After a hearing, the commission, on April 2, 1958, permitted the rates to become effective as provided in Tariff 442-B, but added that "decision and order on this docket will be issued as soon as possible."

The 442-B schedule provided for reductions in rates of 1½ cents per 100 lb below prevailing truck rates for distances in excess of 75 miles. Rates for distances of 75 miles or less were substantially the same as existing truck charges.

The record showed that between 90 and 95 per cent of all intrastate traffic in petroleum products in Iowa involves movements of up to 150 miles. The proposed rates, according to the railroads, would produce average revenues per tank car exceeding the per-car average mile earnings for all cars transported by the roads.

But on July 28, the commission handed down a decision and order finding the railroads in direct competition with truckers who had protested the rates.

"In order to recognize and preserve the inherent advantages of each mode of transportation," the commission, ruled, rail rates for distances under 150 miles should be no lower than corresponding rates of truckers. The commission ordered the railroads to establish rates on a parity with truck charges up to 150 miles and limited the roads to 1½ cents per 100 lb under truck rates for distances over 150 miles.

Thus, the railroads are contending, the commission required the roads to maintain rates at truck-rate levels "and denied . . . the right to reduce such rates so as to successfully compete with tank truck motor carriers on substantially all intrastate traffic in such commodities."

By its order, the plaintiffs continued, "the commission has in effect granted to the tank truck motor carriers a monopoly of the transportation of petroleum products in Iowa, moving over distances of less than 150 miles. The statutes of Iowa grant no such power to the commission."

Railroading After Hours with Jim Lyne

PENSIONS OVEREMPHASIZED?—Traffic Vice President S.J. Witt of the Nickel Plate raised the question with me the other day, as to whether excessive reliance on pensions is good business for railroad employees. He said he thought, if a young fellow could take the money his pension payments cost and buy sound stocks or real estate, he'd have more at retirement time than he'd ever get out of a pension.

I did a little figuring—as to what $30 a month laid by would come to in 30 years, and my total was over $38,000. I compounded the interest annually and estimated a 7 per cent return (5 per cent as a dividend and 2 per cent for inflation and growth).

I was too conservative in my figures—because some sound investment trusts have done a lot better than that in the past ten years.

RAILROADERS IN POLITICS:—I see where President Russ Coulter of the TP&W has written a letter to all employees, suggesting to them not only that they register and vote, but that they contribute to the treasury of the party of their choice. He made it clear, of course, that the employee's choice of parties and candidates is strictly his own business.

No doubt about it—the railroad industry would never have got as far up the creek politically as it did, if railroaders had regularly shown the political activity they did this year when the Smathers bill was being debated. I hope (and believe) most railroaders who got active this year found the experience pleasant and will continue it.

There are a lot of respectable politicians who appreciate the claims of the railroads to fairer treatment—but they just can't afford to put in their time on things that are not reflected in activity which will give them some voters' support. No businessman can afford to put in a lot of time and effort on merchandise that doesn't ring the cash register. And the politician can't afford to knock himself out on questions that do not mean votes.

DINGERS & RINGMASTERS:—Chief Clerk C. A. Pressman of the WM at Cumberland —on the question of why yardmasters should be called "dingers" —says that dinging means to talk with vehemence. He suspects yardmasters may occasionally do so. He prefers the term "ringmaster." But am I wrong in my belief that neither of these words is generally used or recognized—say, as hoghead is?

MORE ON STANDARD GAGE:—Professor Newt Morton at Kent (Ohio) State University cites an authoritative reference on the origin of 4 ft 8½ in. as standard gage. The book is English—"Railways and Geography" by Andrew C. O'Dell, published in 1956. The author says definitely that "Roman road grooves in Britain can be traced with a gage of 4 ft 8 in."

Does everybody accept this statement as fact, or should I inquire further? Professor Morton says the O'Dell book has a lot of information on railway gages, all over the world.

New Products Report

Transistor Carrier Telephone

A new 5-lb carrier telephone is a self-contained, battery powered unit with transistor circuitry, which may be used for telephone service over line and control wires without disturbing the normal function of these wire circuits. Although it is primarily intended for direct connection across CTC control lines, it may also be used from line to ground to avoid the excessive attenuation of heavily loaded circuits.

Under normal CTC line conditions, the range of communication between two of these carrier telephone units may reach over a distance of 75 miles. Two 8-volt Mercury cell batteries provide at least 40 hours actual transmitting time. Since transistors are used in all of the amplifier stages and as all other components are applied with conservative ratings, only the batteries will require periodic replacement. The overall case dimensions are 2 in. by 4⅞ in. by 11 in. Each carrier telephone is assembled in a two-part molded plastic case. These carrier telephones are available in two carrier frequencies of 30 kc and 35 kc. *Union Switch & Signal, Division of Westinghouse Air Brake Co., Dept. RA, Swissvale, Pa.*

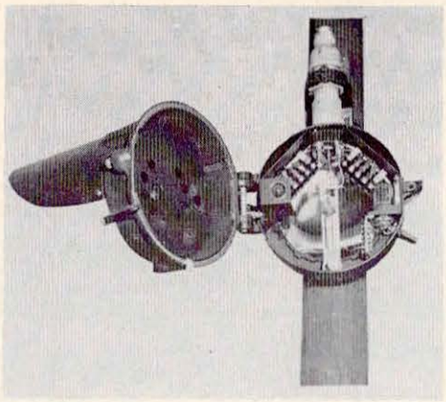


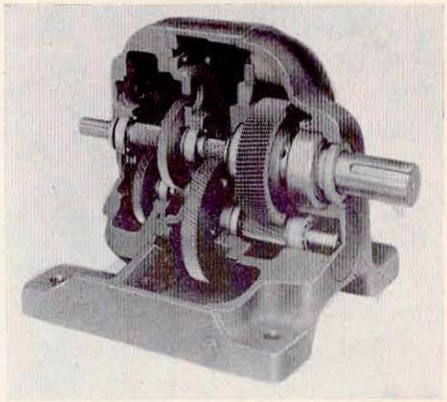
Photo-Electric Detector

A rugged, heavy-duty, photo-electric detector gives reliable service under severe operating conditions of mechanical shock, vibration and exposure to weather. At the same time it offers high sensitivity and effective discrimination against extraneous light. The detector can be used for any application in which photoelectric detection is desired, such as automatic illumination control, a counter for conveyors or traffic of any type, for indicating physical presence as in trespasser detection, and for monitoring light absorption as in smoke or fog detection.

The detector consists of two units, a lamp unit and a detector unit, each housed in a standard aluminum case. The lamp unit provides a concentrated beam of sufficiently high intensity to "override" changes in background lighting. The detector unit includes a parabolic reflector which focuses the incoming light on the photocell, and a light control shield and a baffle which provide high immunity to interference from other light sources. An amplifier tube, housed with the photocell, amplifies the output of the photocell to operate an external relay. *General Railway Signal Co., Dept. RA, Rochester 2, N. Y.*

Carloader

A new 4,000-lb capacity, solid-tire fork truck with a 40-in. wheelbase is designed for loading or unloading boxcars and trucks for operation in low-stacking areas where maneuverability is required. Powered by a four-cylinder Continental engine of 124 cubic inch displacement, "Carloader 4024-S" will travel 7.4 mph forward and 6.3 mph in reverse. It will climb a 16 per cent grade loaded. For short turns, rear wheels have 72 deg angularity. *Industrial Truck Division, Clark Equipment Co., Dept. RA, Battle Creek, Mich.*



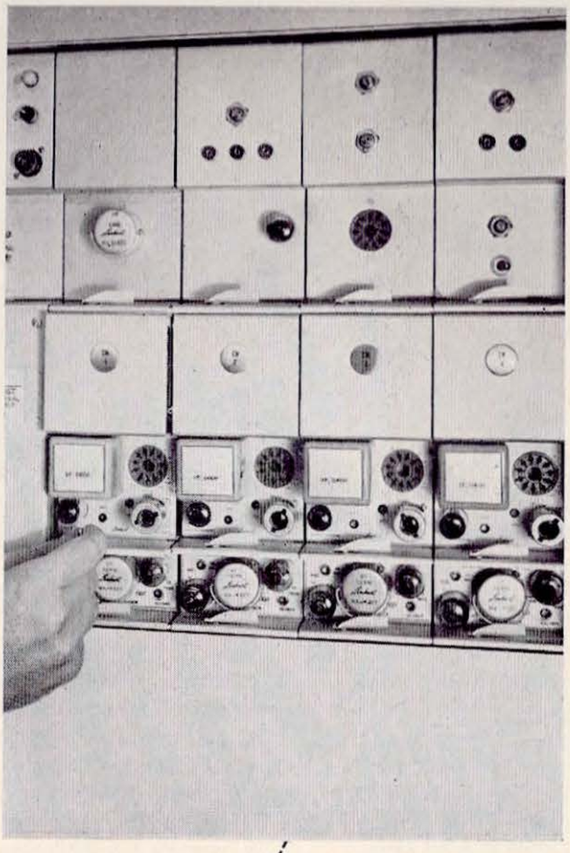
Helical Gear Drives

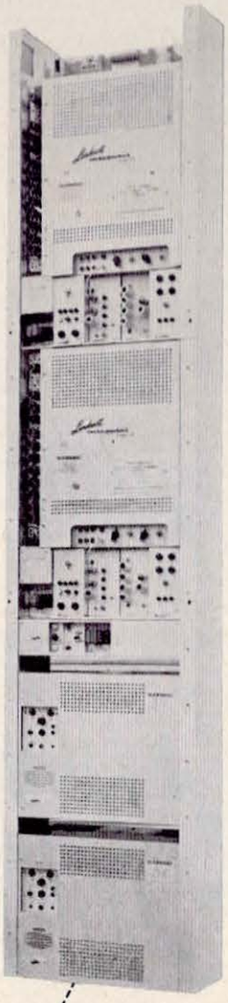
A quadruple reduction helical gear drive is available in five sizes and extends the range of ratios as high as 2,217 to 1. The simple gear arrangement of these speed reducers consists of helical gear trains operating in high capacity ball and roller bearings mounted in a cast iron housing. Input and output shafts are in the same horizontal and vertical planes. Automatic splash lubrication of all moving parts assures dependable lubrication and dependable operation. *Link-Belt Company, Dept. RA, Prudential Plaza, Chicago 1.*

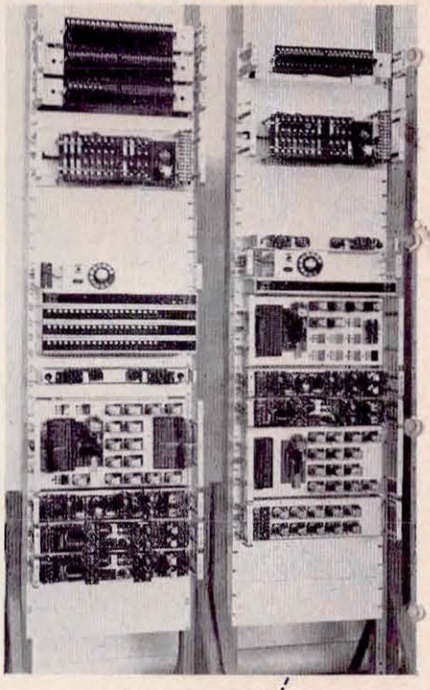
Depolarized Battery

The AN 110, a dry air depolarized primary battery, has a rated capacity of 1,000 a.h. and nominal voltage on discharge is 1.2 volts. Maximum continuous rating of the cell is 0.4 amp. This cell may be used for track circuits, electric switch locks or switch lamps. No dangerous liquid electrolyte is contained in the cell nor does the cell require the addition of any water for activation. Size is 7 in. by 7 in. by 8½ in. overall and weight is 20 lb per cell. *The Carbone Corp., Primary Battery Division, Dept. RA, Boonton, N. J.*

Lenkurt adds a new communications





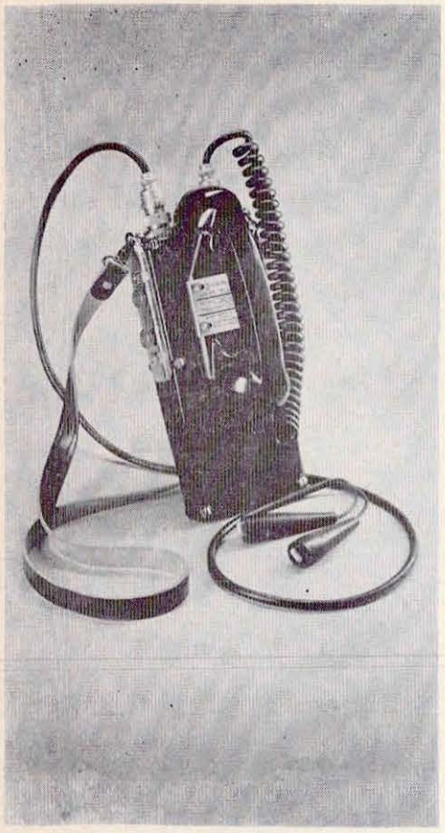


Complete 4-channel terminal assembly of Lenkurt Type 45C Carrier. By the use of different "plug-in" subassemblies, each channel can be adapted for different frequency levels, signaling options and voice-frequency terminations. Plug-in compandor on each channel permits use of many lines otherwise unsuited for high-frequency carrier transmission. May be expanded by addition of "plug-in" units.

Lenkurt 74A "Microtel" microwave terminal, designed for the high-quality transmission of up to 240 channels of telephone, telegraph, telemetering, supervisory and remote control information in the 6000-mc. band. Provides system length up to 300 miles with medium loading and multiple repeater points. With use of r-f circulator, 2, 3 or 4 terminals can be added to the same antenna system.

Lenkurt 51B Supervision and Control System can be linked to any radio or wire-line network to provide 20 control functions and 20 supervision functions at 4 remote locations, with complete supervisory control centered at one point. It has provisions for supervision of up to 80 change of status indications and the control of up to 80 external functional circuits. Each bay is a complete package in itself.

New Products Report



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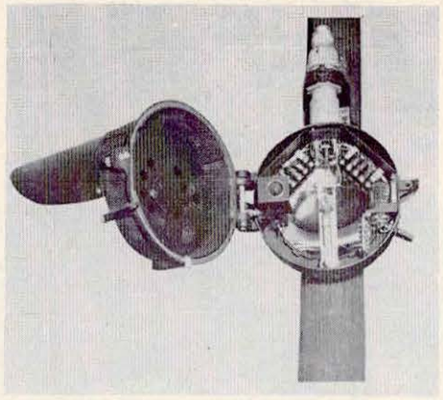

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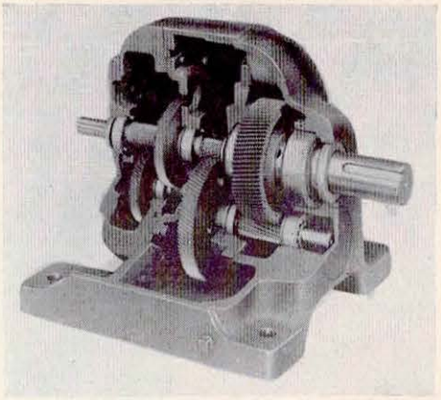

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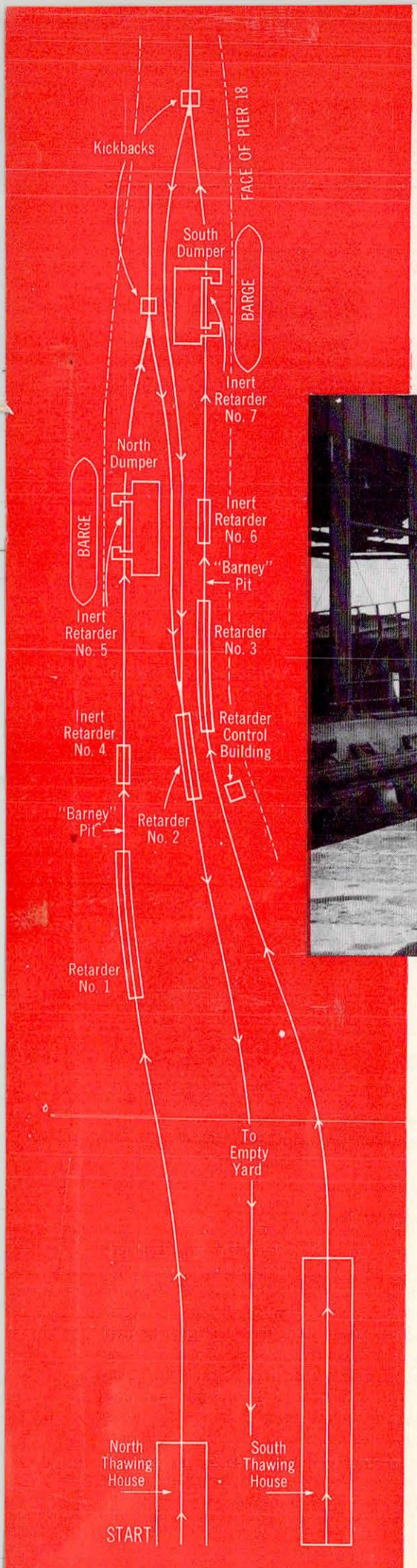
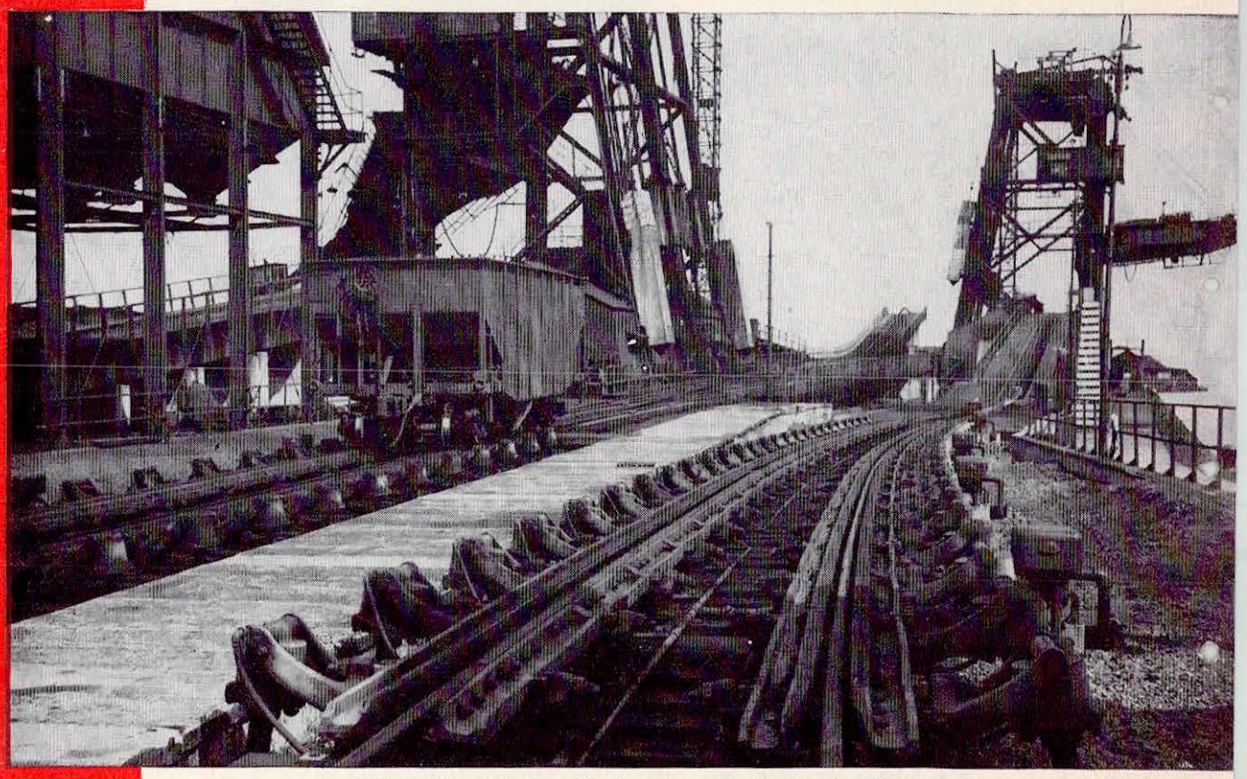


How the new UNION car-retarder system works — Pier 18 has two coal dumping systems and both use the same empty yard. Following through the operation of the North dumper, a loaded coal car leaves the North thawing house, rolls down an incline to retarder No. 1 where its exit speed is reduced, so that when the car rolls on to the "barney" pit, it is stopped by inert retarder No. 4. A "barney" then pushes the car up the slope to the dumper where it is stopped by retarder No. 5. Coal is then dumped into a barge. The next full car pushes the empty car off the dumper. It goes by gravity through a kickback and spring-switch combination for return through retarder No. 2 to the empty yard.

Controls for the power retarders and switches are incorporated in a control machine housed in a new tower building. One operator in this tower surveys the operation and operates the control machine. He has loudspeaker communication with the thawing sheds, the control cabins on the dumpers, and the yard office.



General view of North and South dumpers showing No. 2 and 3 retarders in foreground. Car entering retarder is going to the empty yard.

Fast, low-cost coal handling results from Automation at Pier 18

The Central Railroad of New Jersey recently modernized its coal dumping facilities at Pier 18, Jersey City, N. J. Now, one man sits in a tower, flicks a few levers, and controls loaded coal cars rolling by gravity to the dumpers and empty cars moving from the dumper to the empty yard. Formerly, this job required a crew of car riders and was a costly and hazardous operation.

Now, the job is handled quickly, safely and economically through a system of UNION Electro-Pneumatic Car Retarders. Operating costs have been greatly reduced, and coal is promptly loaded for shipment by barge to New York and New England areas.

What is your materials handling problem? If it involves many carloads of coal, ore or other products, let us show you what can be done with automatic car-retarder systems to increase efficiency and reduce costs. Write for information.

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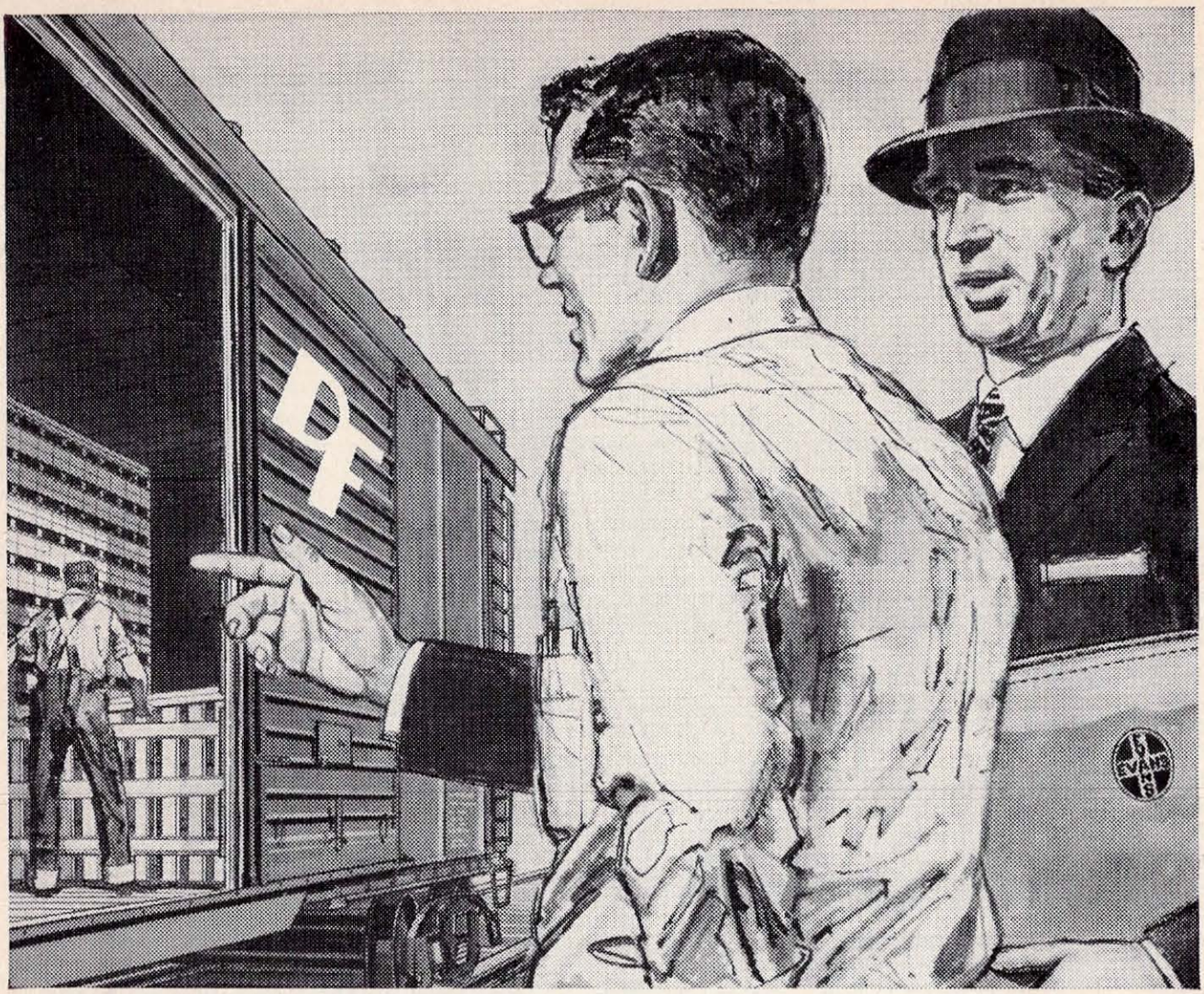

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Pipeline Moves Coal in Ohio

Consolidation Coal Company's long-heralded steel tube seems to be shutting railroads out of a market that receives about 1½ million tons of coal annually. What does it mean for the future?

Enough coal to fill 20,000 railroad hopper cars will move through a 10½-in. steel tube between southeastern Ohio and Lake Erie during the next 12 months. And Ohio's coal-hauling railroads will be shut out of a market that receives about 1,500,000 tons of coal annually.

The steel tube is Consolidation Coal Company's long-heralded coal pipeline. It extends about 110 miles from near Cadiz to Eastlake, Ohio, from Consol's Georgetown mine preparation plant to Cleveland Electric Illuminating Co.'s power plant east of Cleveland (RA, Sept. 1, p. 32).

Cleveland Electric has contracted with Consol for 18,000,000 tons of pipe-line coal over the next 15 years. That rate of delivery—about 1,200,000 tons per year—covers approximately 80% of Eastlake's coal needs. The remaining 20% will be trucked in. Figuring Eastlake's coal consumption at 1,500,000 tons, and using 62 tons as the average railroad car capacity, produces a 24,100-carload annual total of traffic that railroads won't be getting.

Savings Equal $1 a Ton

A railroad officer indicated early in September that rail coal traffic into the plant hadn't dried up completely—but the coal was moving in very small volume, nowhere near previous levels. The railroads had filled almost all the coal needs at Eastlake since the plant was opened.

But the railroads' loss becomes CEI's gain, according to the utility. Annual savings in transportation costs realized from the pipeline method, CEI, estimates, will amount to about $1,000,000—roughly, $1 per ton.

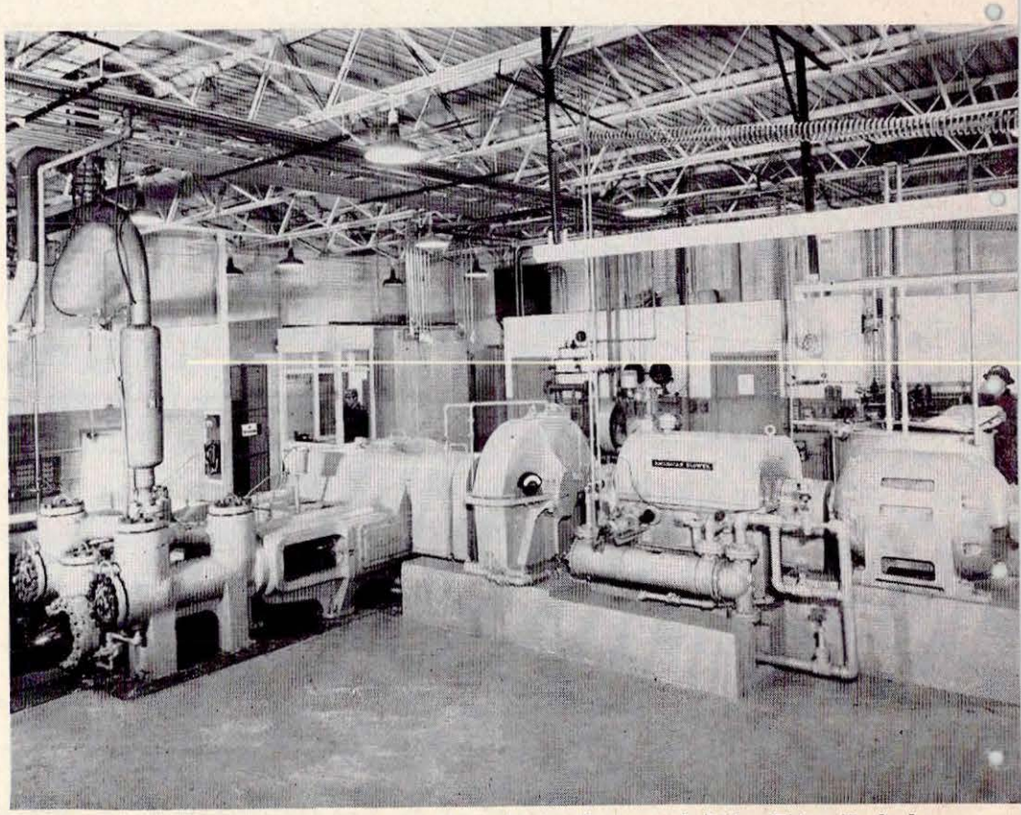
(CEI has also drifted away from rail transportation in most of its other operations. Two steam generator plants in Cleveland and a large power plant at Avon Lake are 100% truck-served. Another power plant at Cleveland is now all-rail, but may not be when a new freeway is completed. A third plant at Ashtabula is served by rail on a truck-competitive rate basis. Overall, CEI consumes about 3,250,000 tons of coal annually, expects the total to climb to 6,800,000 tons by 1968.)

At this late date, with the pipeline an operating entity and a purchase agreement existing, railroads can't do much to compete with the steel pipe for Eastlake's business. Three carriers, however, still have an opportunity to share in the pipeline venture—through long-term options granted by Consol but not yet exercised by the railroads. According to the option arrangement, the Pennsylvania, the New York Central and the Nickel Plate can purchase 15% interest each. Present indications are that the roads will keep a close eye on the operation and its profitability before acting on the options.

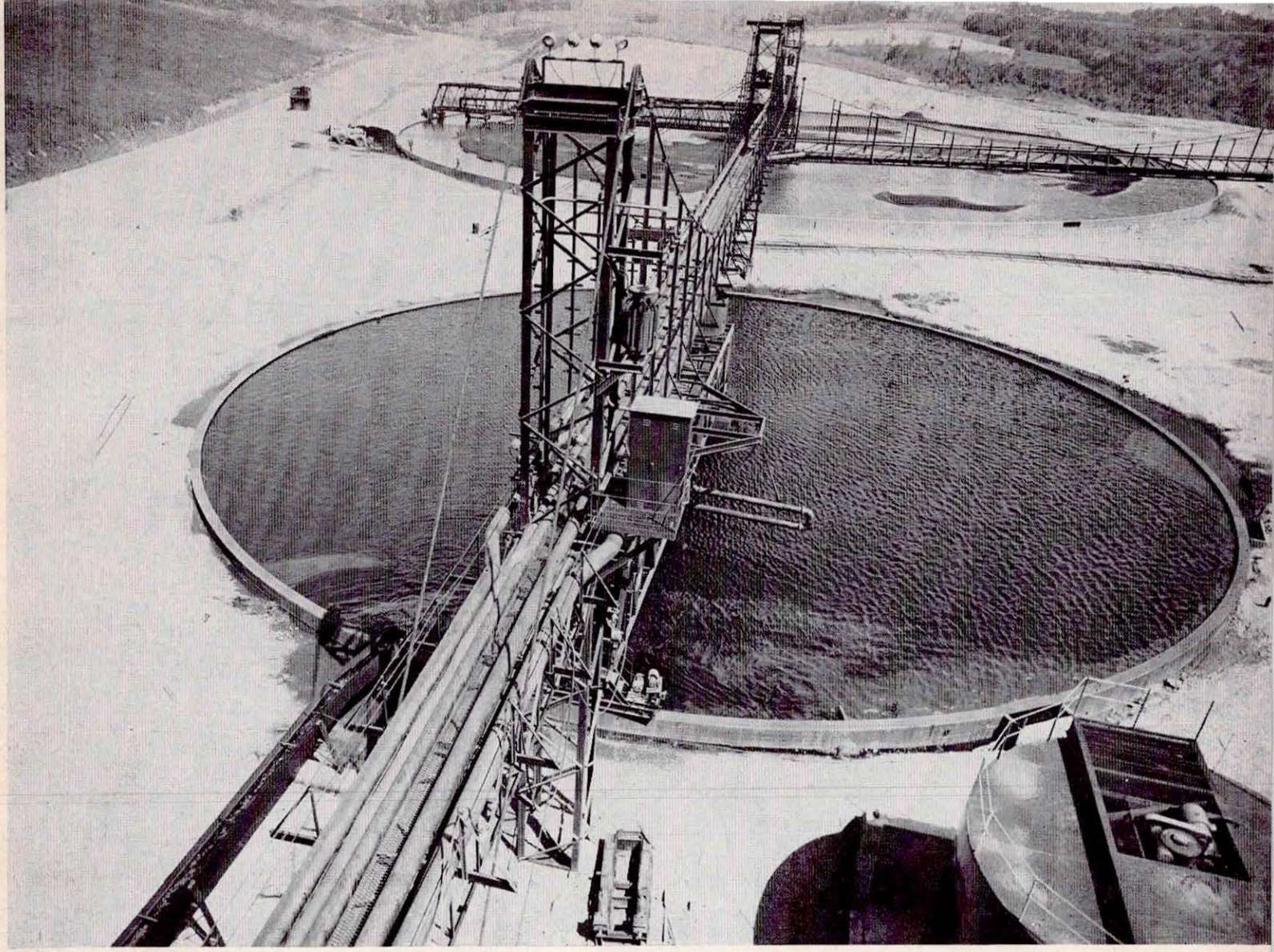
Elsewhere in the CEI picture, one carrier—the NKP— is making efforts to get business from the Avon Lake plant through a proposal to cut rates by about $1.05 per ton. But, says CEI, other roads are fighting the NKP move.

This pipeline, coupled with CEI's increasing use of trucks, points up the long-standing resentment on the part of the coal industry against increasing rail rates on coal. Successive rate hikes since 1946, according to the National Coal Association, have added upwards of $350,000,000 to coal transportation costs. The railroad's share of the traffic has been declining, from about 97% of the total after World War I to approximately 78% in recent years. The barge lines and the truckers have moved in. Over the period 1939-56, barge shipments have more than doubled, and the trucks' share of the business has climbed by about 66%.

Rumor has it that Consol's pipe has stirred up interest in several quarters. But there's nothing definite to indicate that this is the first of several coal lines. A pipeline, observers point out, is only feasi-



THREE PUMPING STATIONS move the mix north toward Lake Erie. Each has three 450-hp reciprocating high-pressure pumps, two for normal use and one for standby service. The initial station at Georgetown controls the quality of the slurry and the rate of pumping. Other stations are spaced at 30-mile intervals.



PIPELINE TRANSMISSION of coal starts here—at Consol's Georgetown preparation plant. Huge slurry storage basins, under constant agitation, assure a constant supply of coal-and-water mix for the pipe. Transit time for mix is 32 hours.

ble where circumstances are ideally specialized. Opportunities for additional pipeline construction are going to be limited. One possibility might be a line from mine to tidewater—combining, as the Consol-CEI line does, the long-term source, the long-term consumer and a demand for coal as the delivered product (as coal rather than as electrical energy).

The tendency, however, is to look at the situation this way:

The electric utility industry is the biggest single market for bituminous coal. This market is going to grow and will involve substantial new construction. Cleveland Electric, for example, has purchased property on the Ohio River, 120 miles from its operating area, for future expansion. But this project won't involve a pipeline—coal's energy will be transmitted as electric power via transmission lines.

The advantages are obvious: With a new utility plant at the source of coal supply, transportation will be no problem. Economically, it may be a toss-up between the pipe and the wire, but the wire has practically unlimited capacity and a pipeline will carry only so much coal. Thus, coal-by-wire appears far more of a threat to railroad coal traffic than any other single competitor, over the long pull.

Perhaps the railroads can offset this threat. In one case, at least, it's apparently been done: Pocahontas carriers have established a coal rate for a Virginia power company to meet the possibility that the utility would build a new plant at the mine. The arrangement provides a big per-ton discount if 1,500,000 tons were shipped by rail in a period covering roughly the preceding year.

More Competitive Angles

There are, however, other competitive angles.

CEI, for one, has gone in for large-scale trucking of coal, using a new high-capacity aluminum truck body. While earlier equipment averaged 18 tons' capacity, the utility, by means of the new truck body, has boosted capacity to 27 net tons—maximum permitted in Ohio.

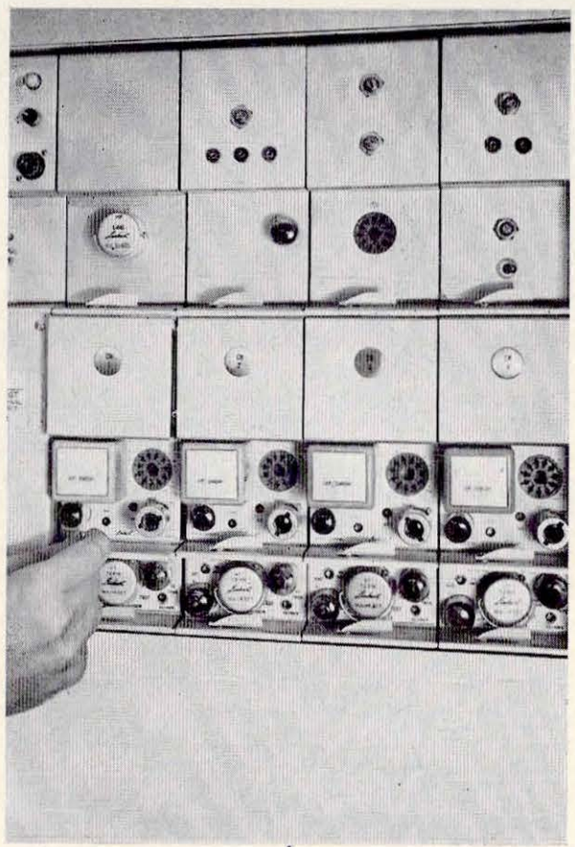
There's also a probability that the belt conveyor will be brought back to life next year in Ohio. The proposal has kicked around for a decade, never quite successfully. And as a footnote on the conveyor situation: Link-Belt Company has been awarded a contract to make what's billed as the world's longest cross-country belt conveyor, linking a quarry to a cement mill in Oklahoma. The line, designed to deliver 1,000 tons an hour, is to be completed by early 1959.

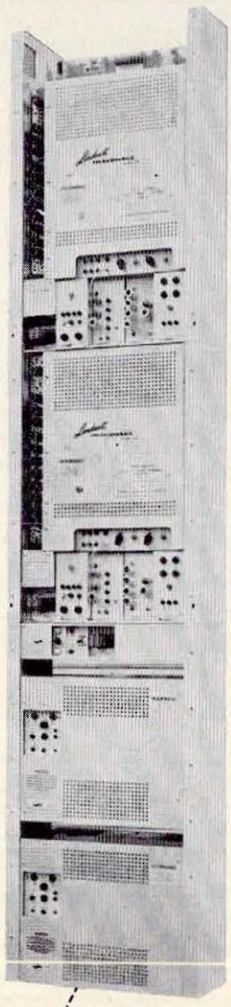
And off in the realm of pure speculation—at present, at least—is the dream of the completely automated robot railroad. Such a line would be an adjunct to present rail service, a separation of the wholesale from the retail in rail transportation. It would deal in trainload quantities of bulk commodities. It could perhaps produce whopping economies in volume transportation. It would also probably be wellnigh impossible to attain in view of existing labor agreements, to name but one catch in the idea.

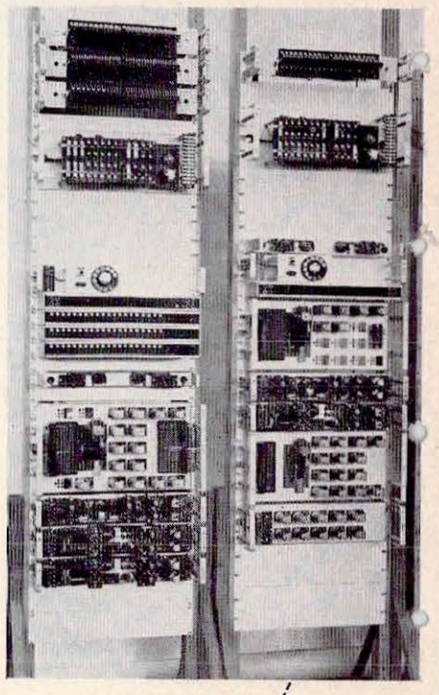
There was a time, however, when the long-distance pipeline itself was just a

(Continued on page 24)

Lenkurt adds a new communications







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Pipeline Moves Coal in Ohio

(Continued from page 21)

theory. Consol engineers conceived the idea some 10 years ago. It was developed as a joint Consol-CEI undertaking. Its cost—including line, preparation facilities and drying equipment—has amounted to more than $13,500,000.

It was no easy path to the announcement that the line "is now in full operation." Consol (then Pittsburgh Consolidated Coal Company), obtained the right of eminent domain for the pipe, but prevailing policy was aimed at purchase of land rights for construction, wherever possible. Construction moved ahead rapidly. But completion brought with it a new set of problems—caused mainly, it's reported, by inability of the crushing and screening equipment to meet the rigid standards required for moving the coal-and-water mix. During one early operation, an unexpected heavy concentration of heavy, coarse coal entered the line, caked and froze. Digging finally broke the jam.

Since then, Consol has beefed up the gear used both for preparing the mix at Georgetown and for separating and drying the coal at Eastlake. The line has gone through elaborate tests. It's now fully operational and, in a recent 30-day period, delivered coal at a rate in excess of designed capacity.

Three Pumping Stations

Three pumping stations keep the coal-and-water slurry moving through the tube. One is at the start of the line; the other two are spaced at 30-mile intervals moving north through the roughest terrain traveled by the pipe. Each station has three pumps, two normally used and one for standby duty.

The coal is prepared at Georgetown, cleaned and crushed to prescribed size, then mixed with water to form the slurry. Thirty-two hours after the mix enters the pipe it arrives at Eastlake, where the coal and water are separated. The coal is dried for use in the utility's furnaces, the water is discharged into Lake Erie.

It's probably too early to assess the worth of the solids-carrying pipeline as a transportation medium. But for the present in Ohio, the situation is pretty well summed up by one railroad officer's wry comment on the Consol line:

"It's there—we're not getting the traffic. And right now there doesn't seem to be a whole lot we can do about it."

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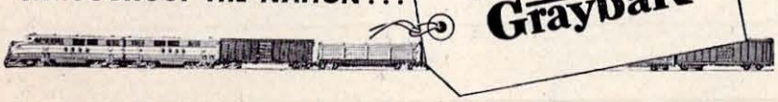

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This Month

Highlights from other railway publications of Simmons-Boardman

COST CUTTING in signal maintenance work by providing maintainers with jeeps or trucks instead of track motor cars is a trend on many roads today. How to get the most out of automatic classifications yards was another subject up for panel discussion at the annual convention of the Signal Section, AAR.
—Railway Signaling & Communications

•

THE MISSOURI PACIFIC has a bridge that has some of the characteristics of a boat. Because levees on both sides of the stream were raised above the track level, the bridge deck was converted into a water-tight "trough" and the spans were anchored to the piers as protection against uplift.
—Railway Track & Structures

•

HYDRAULIC "SHOCK CONTROL" installed on latest Santa Fe box cars is newest approach to absorbing high-energy coupling impacts.
—Railway Locomotives & Cars

•

WHAT IS this thing called "Value Analysis?" Lawrence D. Miles, General Electric's manager of value analysis service, explains the method and tells how it can cut material costs from 15 to 25 per cent.
—Railway Purchases & Stores

•

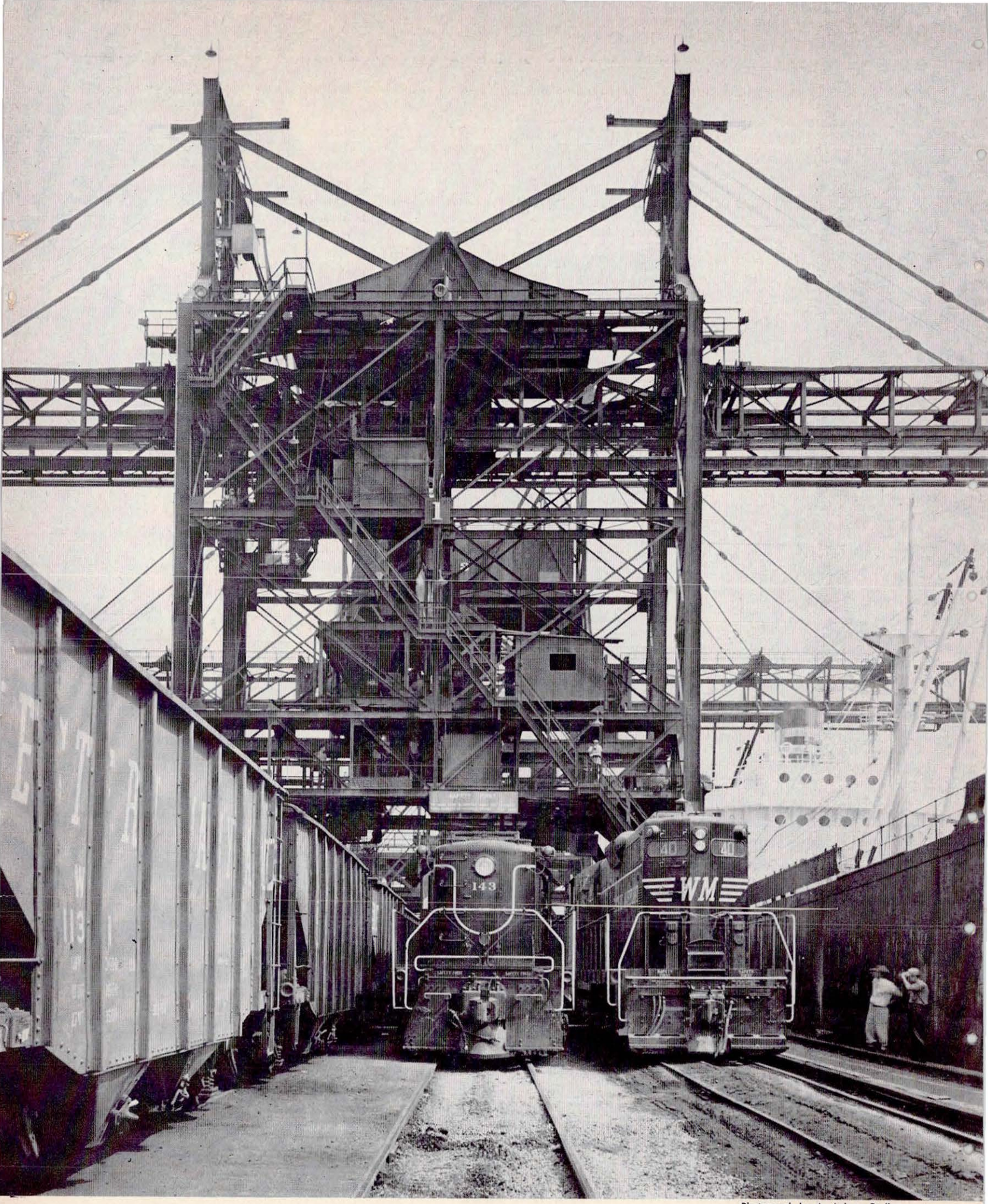
CIRCUIT PROTECTION is quite important for communications, especially where communications circuits are on the same pole line as power lines. Protection against high voltages and/or lightning involves line transpositions, shielding, voltage-limiting devices and adequate grounding.
—Railway Signaling & Communications

•

A MOTOR-DRIVEN spot board that is remotely controlled by radio is now available for use in track-surfacing work. By the use of pushbuttons, the foreman, sighting through a telescope, can move the spot board to the point desired without manual assistance.
—Railway Track & Structures

•

SELECTION AND TRAINING of personnel is ever increasing in importance in virtually all railroad departments. There are basic rules and considerations which must be observed, one author points out, if employees are to be equipped to qualify for eventual supervisory positions.
—Railway Purchases & Stores



Photograph by A. Aubrey Bodine

GIANT CRANES at Port Covington are starting point for WM's mechanized system of waybilling inbound ore.

FA-127

839-WESTERN MARYLAND RAILWAY COMPANY-839
BALTIMORE, MARYLAND

FREIGHT WAYBILL

WEIGHT IN TONS	
GROSS	NET

TO			FROM		COMMODITY
CONSIGNEE			SHIPPER		
ROUTE			VESSEL		PORT COVINGTON CRANE WEIGHT
WAYBILL DATE	SHIPPING STATEMENT NO.	WAYBILL NO.	LOT NO.	WEIGHT IN CWT.	CAR INITIALS AND NO.

REDESIGNED WAYBILL is written by machine. Five copies travel with the car. Fifth copy is on heavy manila card stock; four top copies are on special transparent paper so extra copies can be made quickly by Diazo process.

How WM Waybills Ore by Machine

The Western Maryland has installed a fully mechanized procedure for waybilling cars of import ore moving out from the road's Port Covington docks at Baltimore, Md.

This new system, both faster and more reliable, substitutes mechanical repetition for hand copying. Chance of error is virtually eliminated since all data are preserved in punched paper tape. Ore trains out of Port Covington depart more promptly.

No change has been imposed on either shipper or consignee. They may, in fact, use the new procedure to advantage where the mechanized setup harmonizes with their own handling of paperwork.

Two basic documents—a redesigned waybill and a shipping statement—are embraced in the new system. Both are produced mechanically from the same raw data; extra copies of either can be prepared cheaply and quickly. The shipping statement, which is a recapitulation form, takes the place of various separate documents formerly in use—the shipping notice, the weight certificate, the freight bill and the blanket waybill. The redesigned waybill also serves important added requirements.

Starting point for preparation, and subsequent use, of these new forms is in the weighman's cab—located high above ground in the respective ore cranes at the port. A weighman's job is to record the lot number of each carload of ore, the total cwt. dumped into each car, and the initials and number of each car.

Each weighman is provided with a Teletype for recording these data. As the machine prints out the information for him, a punched and interpreted paper tape is being generated in the yard office some distance away.

The yard-office tape contains the "variable information" peculiar to each car. As is common with such tapes, it can activate other Teletype equipment to print out exactly the same data originally printed on the machine in the weighman's cab.

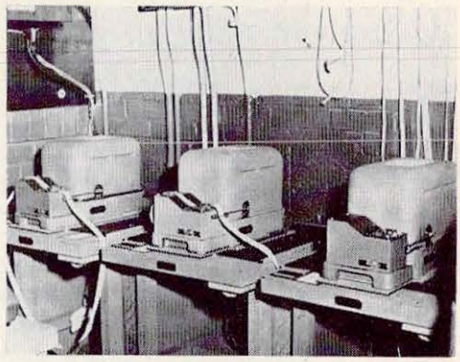
The yard office is equipped with a battery of Teletypes—three units being provided to "read" punched paper tape. One of these machines provides necessary "fixed" information for each car—such information as To, From, Commodity, Consignee, Shipper, Route, Vessel, Waybill Date, and Shipping Statement Number. The master tape containing this information is pre-cut before an inbound ore vessel arrives at Port Covington.

A second machine automatically furnishes the waybill number, starting with No. 1 and continuing serially to cover all cars bearing the same ore lot number. The third unit reads the tape from the weighman—the "variable" data of lot number, weight and car identification.

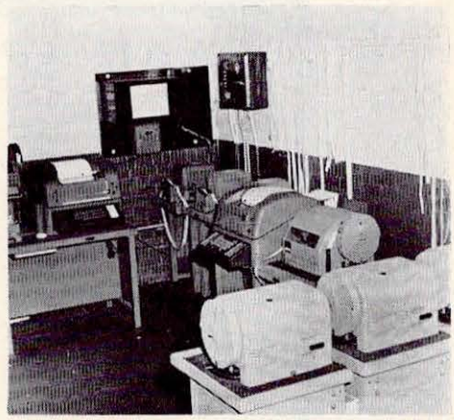
These three "read" units are synchronized to drive the Teletypewriter which generates waybills. There is, therefore, no chance of error in transmitting or transferring data. Fixed information for each lot number is exactly the same on all waybills. Waybill numbers are in reliable sequence, and variable data are recorded exactly as they were by the original weighman in the ore crane.

As the waybills are prepared on the

(Continued on page 34)



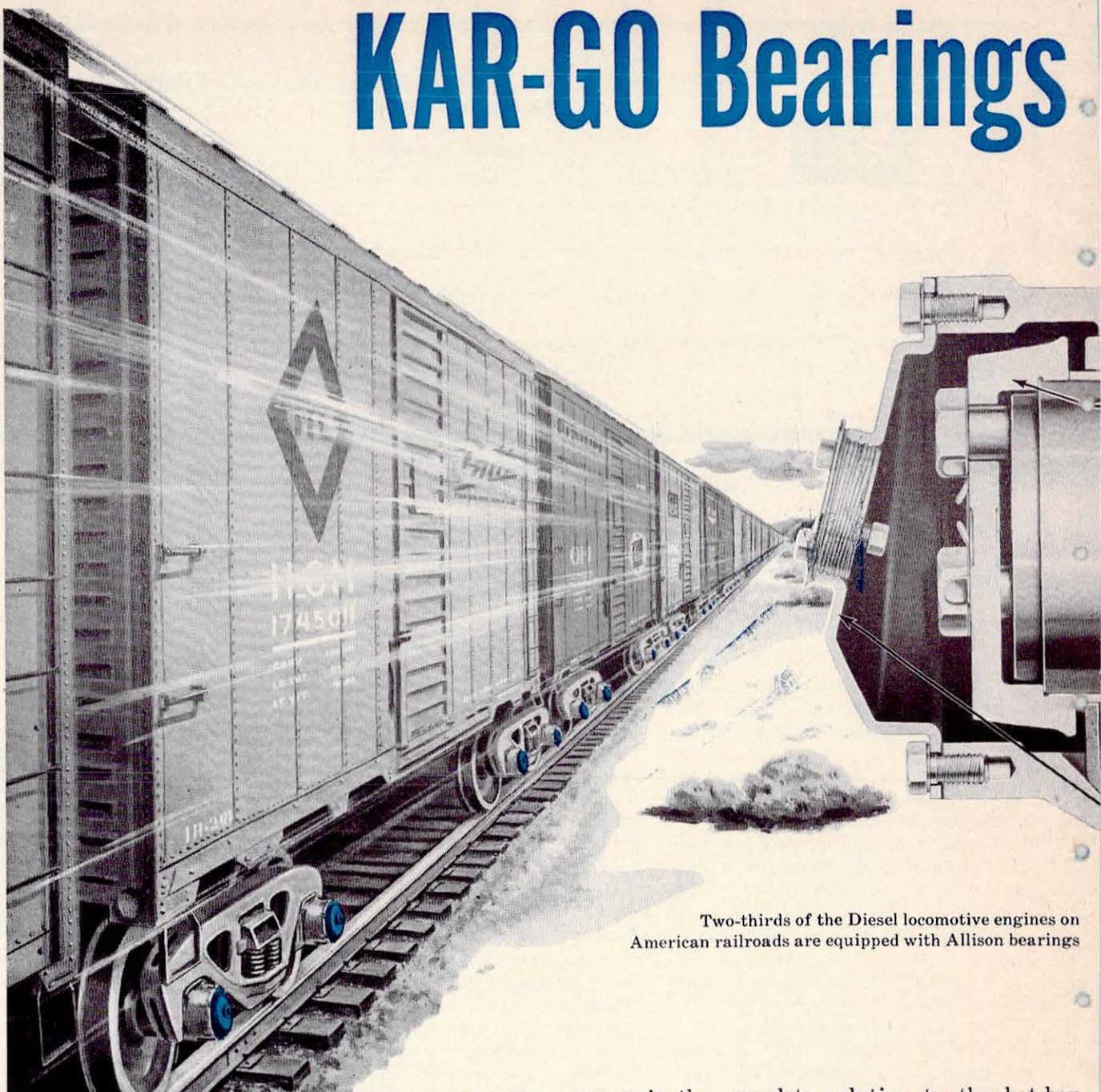
READERS IN TANDEM feed data to single Teletypewriter that prints waybills. Synchronized units provide fixed and variable information along with waybill numbers.



Photographs by H. A. Baker

BUSY CORNER at yard office is focal point of new setup. Readers (partly obscured at back) feed data to teletypewriter at right. Machines at left produce fixed-information tape. In the foreground are the tape receivers.

KAR-GO Bearings



Two-thirds of the Diesel locomotive engines on American railroads are equipped with Allison bearings

AAR APPROVED!

38 U.S. and Canadian railroads and more than 85,000,000 in-service bearing miles prove Allison KAR-GO Bearings solve the hot-box problem.

K eeps lubricant sealed in—dirt sealed out.

A verages one inspection every 20,000 car miles.

R epays its cost in two years by cutting maintenance and operating expense.

G oes 75,000 bearing miles on 1 pint of oil.

O ffers railroads a low-cost solution to the hot-box problem.

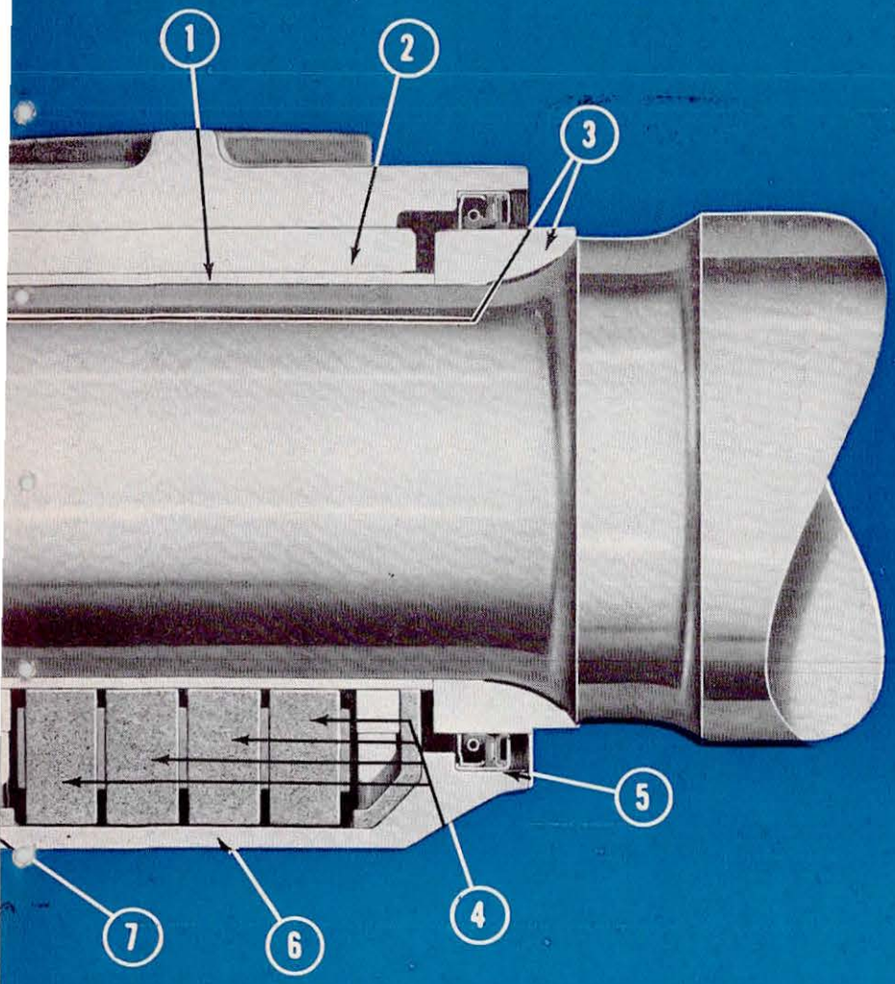
HERE'S the complete solution to the hot-box problem—designed for railroads hauling longer trains on faster-than-ever schedules.

It's the Allison KAR-GO Cartridge Bearing—better by far than any "gadgetized" journal brass bearing because *it combines rugged low-cost construction with sealed-in low-maintenance features.*

The fact that KAR-GO can whip the hot-box problem at a penny-pinching price is proved by millions of in-service railway miles and three years of

KAR-GO, ALLISON DIVISION OF GENERAL MOTORS.

end hot boxes at lowest cost



THE INSIDE STORY

Built to run for thousands and thousands of miles, the Allison KAR-GO Cartridge Bearing gives you a *sure* answer to the hot-box problem at a new, low cost.

1. JOURNAL SLEEVE
Smooth, hardened surface for maximum bearing life—eliminates axle wear.

2. ALUMINUM ALLOY BEARING
Economical, precision-fitted, full round for maximum heat dissipation.

3. THRUST RING AND CAP
Absorb lateral thrusts on hardened faces. Ring provides highly finished surface for oil seal.

4. FELT WICK LUBRICATOR
Insures adequate oil delivery to bearing—spring-loaded to make constant contact with journal sleeve.

5. OIL SEAL
Double lip, automotive type; keeps oil in —dirt and water out.

6. HOUSING
Rugged pearlitic malleable iron; completely encloses entire assembly; eliminates need for separate adapter.

7. COVER ASSEMBLY
Provides sealed closure, oil-filler plug and pressure-relief valve.

rugged field testing. In fact, these bearings will actually pay for themselves in two years by maintenance savings and elimination of service failures. What's more, once you go for your first set of KAR-GO bearings, you'll find more of these bearings can be added to your new car fleet from savings in hot-box elimination alone.

If you want to keep your equipment running on schedule—end hot boxes and cut terminal inspection and oiling time—make big savings in maintenance expense—go for KAR-GO on your next conversion or freight-car build.

Allison

KAR-GO

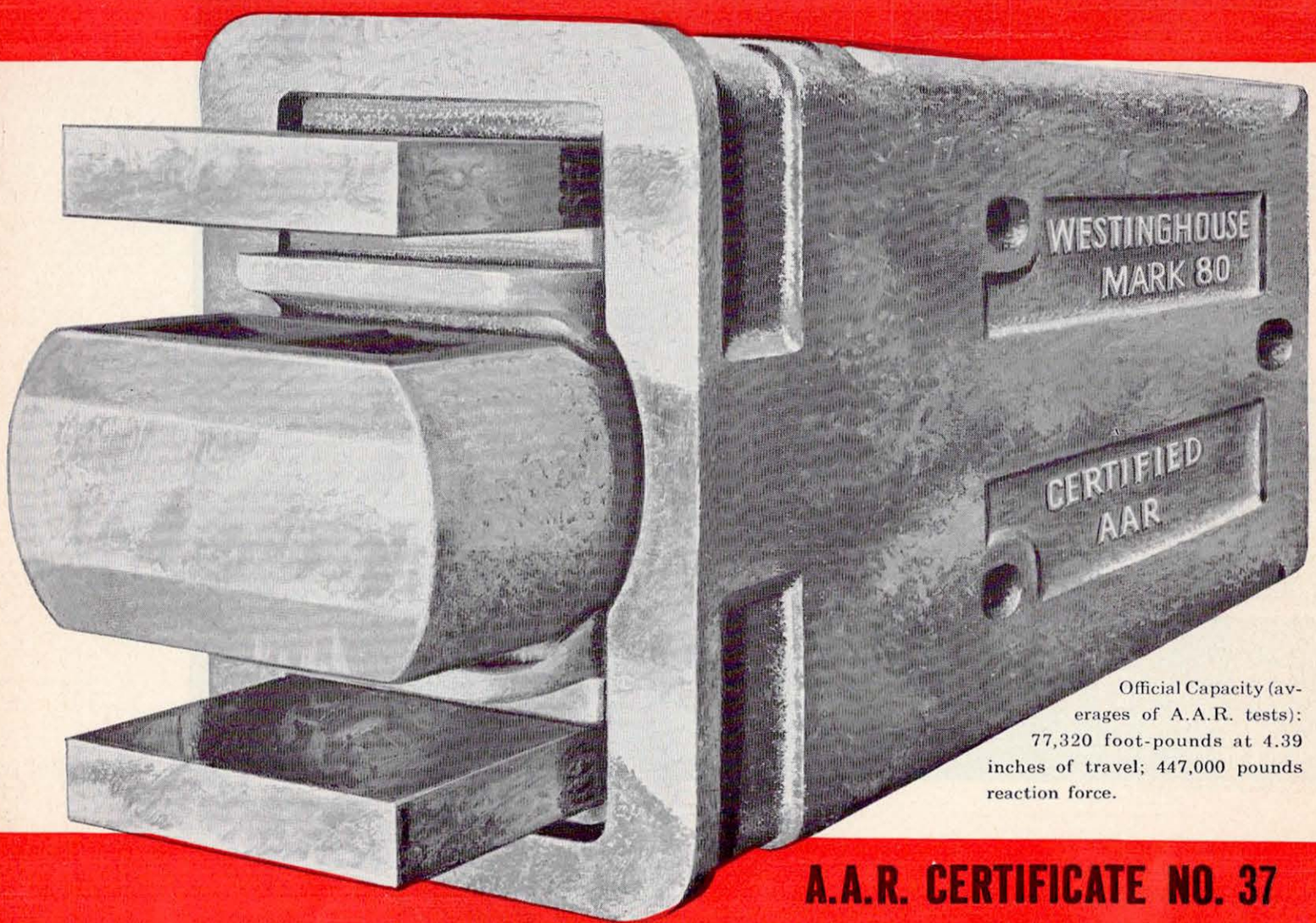
JOURNAL BEARINGS

Indianapolis 6, Indiana

A product of and built only by the Allison Division of General Motors

Another "FRICTION FIRST" from

CARDWELL WESTINGHOUSE



Official Capacity (averages of A.A.R. tests): 77,320 foot-pounds at 4.39 inches of travel; 447,000 pounds reaction force.

A.A.R. CERTIFICATE NO. 37

It's the WESTINGHOUSE

MARK 80

FRICTION DRAFT GEAR

FOR 36-INCH POCKETS

LET MARK 80 REDUCE YOUR DAMAGE CLAIMS

This amazing new gear has OVER FOUR TIMES the capacity required by A.A.R. in draft gears for STANDARD pockets . . . Yet with reaction forces (sill pressures) under 500,000 pounds!

Again...Cardwell Westinghouse makes a friendly worker out of friction. MARK 80 is the POSITIVE ANSWER to modern stresses and strains, assuring lowered maintenance costs . . . longer car life...and very important savings in claims! Specify MARK 80 for priceless new protection!

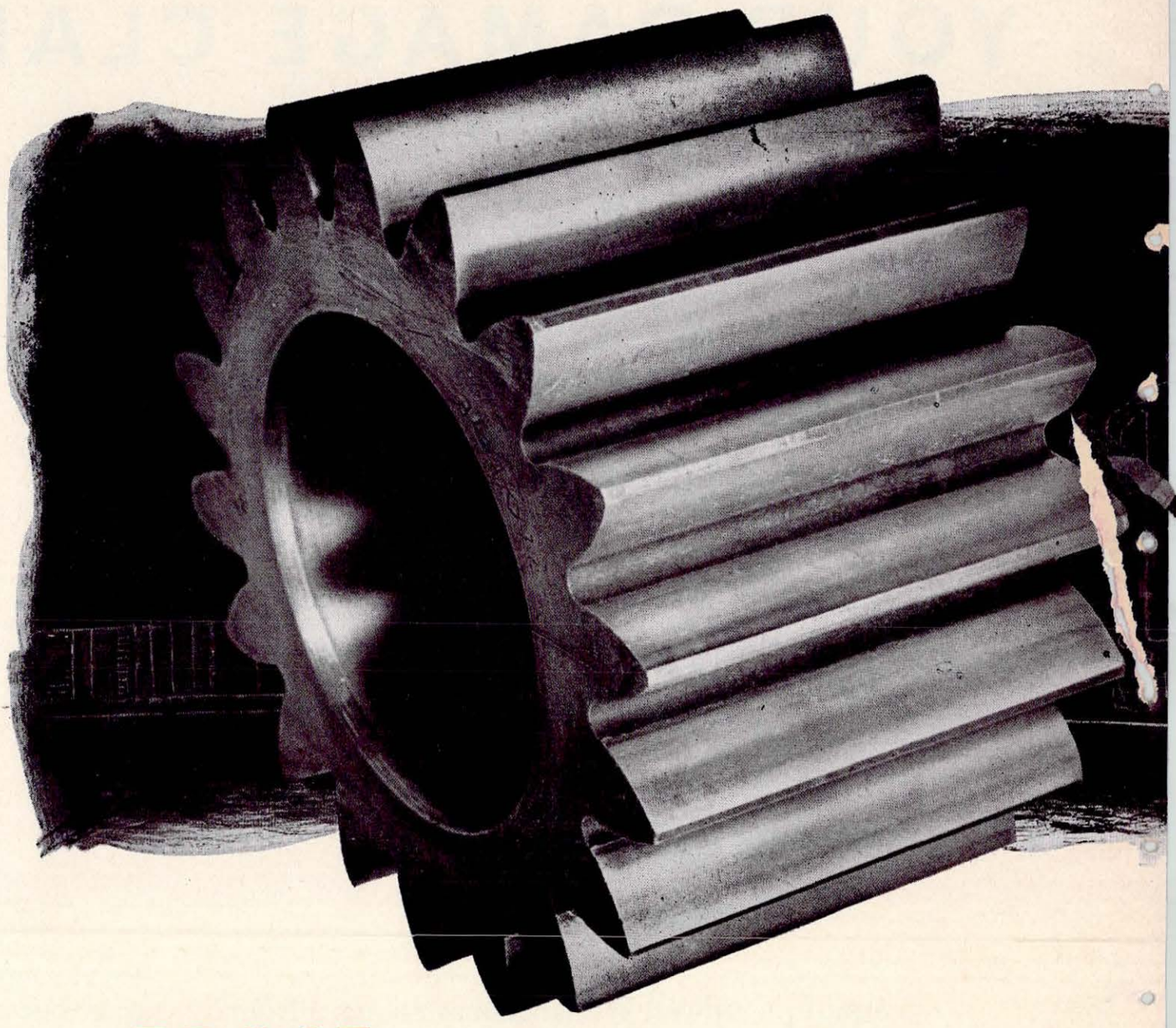
CARDWELL WESTINGHOUSE

COMPANY

332 S. Michigan Ave., Chicago 4, Illinois

Canadian Cardwell Co., Ltd., Montreal 18, Quebec

Like New After



PROOF Unretouched photo shows typical traction motor pinion gear from Lehigh and Hudson River Railway Company locomotive after 8 years of service. Commenting on this, W. E. Burns, L and HR Mechanical Superintendent, says: "To date, all axle gears and traction motor pinion gears have shown very little wear. This proves to us the excellent lubricating properties of Sinclair Jet Lubricant TM."

8 Years Service

SINCLAIR JET LUBRICANT TM CUTS COSTLY GEAR WEAR

Sinclair Jet Lubricant TM is a rich, rugged Pennsylvania oil that cushions traction motor gear teeth, prevents undue wear and reduces excessive electrical loads. Now in use on over 100 American railroads, it's unsurpassed for heavy-duty work in Diesel traction motor gears.

Available in 1-lb and 2-lb Poly bags; also in 4-lb Poly bags for recharging at overhauls; in 35-lb pails; 120-lb and 400-lb drums.

For additional information, contact Sinclair Refining Company, Railway Sales, 600 Fifth Avenue, New York 20, N. Y. • Chicago • St. Louis • Houston

SINCLAIR RAILROAD LUBRICANTS

839 - WESTERN MARYLAND RAILWAY COMPANY - 839
BALTIMORE, MARYLAND

SHIPPING STATEMENT

TO | FROM | COMMODITY

CONSIGNEE | SHIPPER

ROUTE | VESSEL | PORT COVINGTON CRANE WEIGHT

WAYBILL DATE | SHIPPING STATEMENT NO.

	WAYBILL NO.	LOT NO.	WEIGHT IN CWT.	CAR INITIALS AND NUMBER
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
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26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40	TOTAL CARS ON THIS SHEET		TOTAL CWT. OF CARS ON THIS SHEET	

WEIGHT CERTIFICATE AND REVENUE WAYBILL DATA

SHEET OF SHEETS	TOTAL NO. OF CARS	TOTAL CWT. OF ALL CARS	RATE	FREIGHT	ADVANCES	PREPAID

THIS IS TO CERTIFY THAT THE ABOVE NAMED VESSEL HAS DISCHARGED AT THE TERMINAL OF THE WESTERN MARYLAND RAILWAY CO. THE CARGO DETAILED ABOVE

AGENT, WESTERN MARYLAND RAILWAY CO.

FA-178

SHIPPING STATEMENT recapitulates all cars in one lot number of ore. Produced from tape after waybills are prepared, statement replaces four separate forms previously used.

(Continued from page 27)

"mother" Teletype, still another punched paper tape is being produced simultaneously. The consolidated tape brings together the information from the second and third "read" units. The initial recording is thereby preserved to assure accuracy. And from the consolidated tape, plus the original master tape of "fixed" information, the shipping statements, in turn, can be written mechanically.

Five copies of the waybill are prepared. All five travel with the car—the original for use by the last trunk line in the movement; the second and third copies for use by that road, or by a terminal switching carrier or by the consignee; the last two copies for delivery to the consignee.

The consignee gets, in other words, a document originally written by the Western Maryland, free of any error due to human transcription. Delivery of ore is faster, too, since there can be no delay traceable to paperwork.

With multiple copies of the waybill furnished for delivery with each car, the need for early receipt of the customary shipping notice is no longer urgent. The consignee has, in the waybill document, a highly reliable pre-written receiving memorandum on each carload of ore he receives.

Errors Are Eliminated

Meanwhile, as cars begin to move toward destination, the consolidated tape produced along with the waybill is put to work producing the shipping statement. This statement recapitulates all cars of one lot number, and cars are listed on the statement directly by the tape. Again, original record is preserved and chance of error eliminated.

The statement is prepared in the Port Covington yard office as soon as a vessel is unloaded. This work is done on a Multilith master and copies are hand-carried to WM general offices. Here, totals of cars and weight, along with rate and freight charges, are entered by the accounting department. Any number of copies of the final statement can be prepared by Multilith in the road's duplicating bureau. Afterwards, copies of the statement are mailed according to each customer's instructions.

The road has adopted a comprehensive numbering system for the shipping statements. A single number is assigned to all cars in one "lot" of ore. The number appears at the head of all copies of all pages on each shipping statement. The same number appears on each of the individual waybills recapped on the statement, and becomes, in effect, a control number for the entire lot.

Verification Is Fast

As on the waybills themselves, all bills recapped on a shipping statement are numbered serially, beginning with No. 1. This arrangement, plus use of the assigned shipping statement numbers, permits quick verification of the receipt of all cars on the statement—faster than when working with car initials and numbers.

When more than one kind of ore is contained in a vessel, it is customary to apply more than one lot number—e.g., one for each kind of ore. The WM follows this custom with its new setup, but with this addition: Added lot numbers are assigned as necessary when, for the contents of one vessel, more than one consignee, destination, or route is involved.

As a bonus to shippers or receivers who are benefitted by the new procedure, the WM offers to furnish the punched paper tape to any patron who has use for it. The customer can use it, for example, to produce automatically punched cards for use in accounting, not only for his rail freight charges but for the entire cost of ore delivered to each destination.

Since the new system was installed, the road has also found added use for the tape generated in the yard office from the weighman's cab. After waybills are printed, the tape is torn on a car-by-car basis, and clipped to individual bills. When a train is made up, and waybills are arranged in train order, the torn tapes are removed and used to produce wheel reports. Pieces can be hand-fed to the Teletypewriter or, joined by a stapler-like machine, can be reconstructed as a continuous tape.

As the wheel reports are produced, a new consolidated tape can be generated for still another use. Changes in operations on the Western Maryland are even now under study which, with the present development, could lead to sufficient volume to justify use of this second consolidated tape for automatic generation of IBM cards in car accounting.

MARKET OUTLOOK *at a glance*

Carloadings Rise 0.8% Above Previous Week's

Loadings of revenue freight in the week ended September 26 totaled 672,924 cars, the Association of American Railroads announced on October 2. This was an increase of 5,647 cars, or 0.8%, compared with the previous week; a decrease of 66,342 cars, or 9%, compared with the corresponding week last year; and a decrease of 158,724 cars, or 19.1%, compared with the equivalent 1956 week.

Loadings of revenue freight for the week ended September 20 totaled 667,277 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, September 20

District	1958	1957	1956
Eastern	93,150	110,707	126,881
Allegheny	112,738	142,079	154,741
Pocahontas	56,326	62,722	66,716
Southern	118,410	117,743	134,045
Northwestern	108,398	117,502	141,008
Central Western	128,473	120,808	136,259
Southwestern	49,782	53,373	62,786
Total Western Districts	286,653	291,683	340,053
Total All Roads	667,277	724,934	822,436
Commodities:			
Grain and grain products	54,331	47,074	54,803
Livestock	9,170	8,989	12,734
Coal	118,900	139,788	143,429
Coke	7,212	10,652	12,233
Forest Products	40,326	37,260	47,821
Ore	56,236	76,453	92,208
Merchandise l.c.l.	52,148	56,720	62,686
Miscellaneous	328,954	347,998	396,522
September 20	667,277	724,934	822,436
September 13	665,999	741,147	820,849
September 6	563,351	646,117	679,651
August 30	645,432	745,620	784,366
August 23	633,687	759,240	770,413
Cumulative totals, 38 weeks	21,479,297	26,396,972	27,348,482

IN CANADA.—Carloadings for the seven-day period ended September 14 totaled 78,656 cars, compared with 65,302 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
September 14, 1958	78,656	25,443
September 14, 1957	87,285	29,214
Cumulative Totals:		
September 14, 1958	2,627,278	995,266
September 14, 1957	2,850,286	1,175,498

New Equipment

FREIGHT-TRAIN CARS

► *Canadian National.*—Ordered 20 40-ton steel longitudinal hopper cars from Canadian Car Company of Montreal. The cars will be used in the Newfoundland district. Delivery will begin late this year.

► *Illinois Central.*—Company shops' carbuilding program for last quarter 1958 will include: equipping 165 box cars for specialty loading; conversion of 40 box cars to flatcars for piggyback loading; completion of 25 steel cabooses; and conversion of 25 hopper cars for handling wood chips. Shops will also make repairs on about 100 cars per month. IC is recalling approximately 200 employees at Centralia, Ill., Memphis, Tenn., and McComb, Miss., to work on the carbuilding-repair program.

► *Lackawanna.*—Will construct 100 piggyback flatcars by converting existing equipment at its Keyser Valley shops at Scranton, Pa. The new piggyback cars will be equipped with sliding ramps and ACF masts.

► *Union Pacific.*—Ordered 100 new piggyback flatcars from ACF Industries and Pullman-Standard, each firm to build 50 cars, at a total cost of about $1,500,000. The new cars will be 85-ft long (permitting two 40-ft highway trailer vans to be loaded on each car) and will have a 70-ton capacity. All will be equipped with roller bearings. Delivery is scheduled for the first quarter of 1959.

New Facilities

► *Alaska.*—Will call for bids on construction of a passenger terminal building at Fairbanks. Work is scheduled to begin next spring. Estimated cost of the project: $250,000.

► *Detroit, Toledo & Ironton.*—Will construct additional trackage in yard at Napoleon, Ohio, serving Campbell Soup Company plant. Estimated cost is $40,000.

► *New York Central.*—Has ordered 15 hot box detectors from Servo Corp. of America, and plans to order 20 more next year. These orders are in addition to 17 detectors now in NYC service at Wauseon, Ohio; Dock Jct., Pa.; Brimfield, Ind.; and in New York at Syracuse Jct., Canastota, Oneida, Chili and Angola. Those on order for installation this year are to be located at Germantown, Garrison, Savannah and Ripley, N. Y.; Amherst, Crestline, Galion and Russia, Ohio; New Carlisle, Ingalls and Millers, Ind.; and Ann Arbor, Mich..

Maintenance Expenditures

► *Down 13.6% in July.*—Expenditures by Class I roads for maintenance of equipment, way and structures in July 1958 were down about $38.4 million compared to the same month in 1957, according to report of ICC Bureau of Transport Economics and Statistics summarized below:

	July 1958	*July 1957*	*% Change*
Maintenance of Way & Structures	106,005,966	126,667,042	—16.3
Maintenance of Equipment	138,821,714	156,549,053	—11.3
Totals	244,827,680	283,216,095	—13.6

Facts and Figures

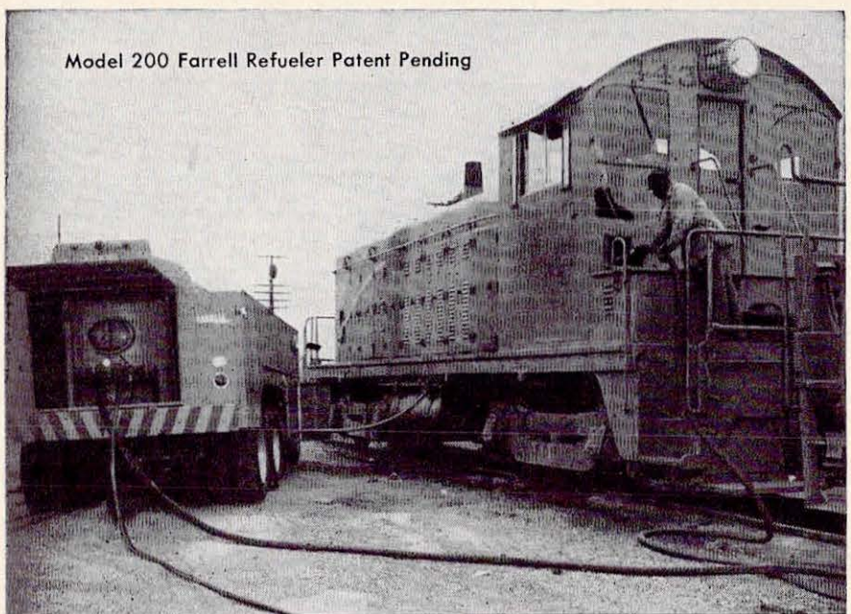
Organizations

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.—The Land Transportation Committee will hold two sessions in connection with the fall general meeting of the AIEE Oct. 29 at the Penn-Sheraton Hotel, Pittsburgh, Pa. Program of the morning session includes papers on "An Automatic Speed Control System for a Gravity Freight Classification Yard," by R. J. Berti, Union Pacific, and T. J. Dosch, Reeves Instrument Corporation; "Automatic Freight Classification Yards—Operating and Maintenance Considerations," by H. A. Scott, New York Central; and "A Method for Automatic Control of Car Retarders," by H. C. Kendall and J. H. Auer, Jr., General Railway Signal Company. At the afternoon session papers will be presented on "Car Accelerator for Railroad Classification Yards," by J. D. Hughson, General Railway Signal Company; "Freight Car Friction Measurements by Doppler Radar," by R. D. Campbell, Union Switch & Signal Division of Westinghouse Air Brake Co.; and "A Novel Generating System for Railroad Cabooses," by D. W. Brown, L. B. Haddad, and R. A. Vercella, Safety Industries.

ASSOCIATION OF INTERSTATE COMMERCE COMMISSION PRACTITIONERS, SAN FRANCISCO REGION CHAPTER.—Charles W. Burkett, Jr., general attorney, Southern Pacific, elected chairman of this chapter. Other officers elected are: Gustave E. Lowe, of Kaiser & Co., as vice chairman, and Charles C. Miller, of the San Francisco Chamber of Commerce, as secretary-treasurer.

COLUMBUS TRANSPORTATION CLUB.—James Clarence Mason, freight sales representative, Pennsylvania, elected president, succeeding the late B. Gregory Ryan, New York Central.

MICHIGAN INDUSTRIAL TRAFFIC LEAGUE.—Newly elected officers are: President, W. C. Urlaub, Bundy Tubing Company, Detroit; vice president, J. B. Flook, E. W. Bliss Company, Hastings, Mich.; treasurer, J. E. Laedlein, Wyandotte Chemicals, Wyandotte, Mich.; executive secretary, B. A. Klukoski, Leonard Refineries, Inc., Alma, Mich.; recording secretary, K. Bickel, Lewis Manufacturing Company, Bay City, Mich.



REDUCING FUELING COSTS?

The operation above demonstrates fueling the locomotive and replenishing the sand supply all in one easy operation, requiring less than 20 minutes. This job is done at the work site. Many dollars and hours are saved because the locomotive does not have to come home for service.

Take the first step toward reducing your fueling costs by writing for complete information.

FARRELL *Manufacturing Company*

806 CASS STREET • JOLIET, ILLINOIS

RAILWAY SYSTEMS & PROCEDURES ASSOCIATION.—The 12th semiannual meeting will be held in the Morrison Hotel, Chicago, October 7-9. The theme of the meeting, "Modern Railroad Data Processing—Step Toward the New Railroad Age," will constitute a progress report on improved methods of data processing. J. R. Fishback, administrative assistant of the Southern at Washington, D.C., is 2nd vice president of this association. It was erroneously stated in RA, Sept. 1, p. 25, that Mr. Fishback was connected with the Soo Line.

ROADMASTERS'-BRIDGE & BUILDING ASSOCIATIONS.—C. E. Neal, division engineer, Northwestern Pacific, advanced from first vice president to president, Roadmasters' Association; S. E. Tracy, superintendent work equipment, Burlington, advanced from second vice president to first vice president; E. F. Snyder, assistant to chief engineer, Illinois Central, elected second vice president; and R. G. Simmons, general roadmaster, Milwaukee Road, re-elected treasurer. Two newly elected directors are J. E. Eisemann, district engineer, Santa Fe, and J. E. Shaw, roadmaster, Texas & New Orleans.

M. H. Dick, engineering editor, Railway Age, advanced from first vice president to president, Bridge & Building Association. B. M. Stephens, assistant to executive vice president, Southern Pacific Lines in Texas & Louisiana, promoted from second vice president to first vice president; H. D. Curie, master carpenter, Baltimore & Ohio, promoted from third vice president to second vice president; and G. W. Benson, division engineer, Central of Georgia, elected third vice president. On the Board of directors, J. M. Lowry, chief engineer, Cotton Belt, and R. C. Baker, engineer of structures, Chicago & Eastern Illinois, were elected for one year terms. H. A. Matthews, general foreman bridges and buildings and water service, Frisco, and M. J. Hubbard, assistant chief engineer system, Chesapeake & Ohio, were elected for three year terms.

Dividends Declared

ATLANTIC COAST LINE.—5% preferred, $2.50, semiannual, payable November 10 to holders of record October 24.

CAROLINA, CLINCHFIELD & OHIO.—Guaranteed, $1.25, quarterly, payable October 20 to holders of record October 10.

MISSOURI PACIFIC.—Class A, 60¢, quarterly, payable October 10 to holders of record September 29.

NORFOLK & WESTERN.—4% adjustment preferred, 25¢, quarterly, payable November 10 to holders of record October 16.

NORTHERN PACIFIC.—50¢, quarterly, payable October 30 to holders of record October 8.

WHEELING & LAKE ERIE.—Common, $1.34¾, quarterly; 4% prior lien, $1, quarterly, both payable November 1 to holders of record October 10.

July Accidents

The ICC has published its Bureau of Transport Economics and Statistics' preliminary summary of railroad accidents for July and this year's first seven months. The compilation, subject to revision, follows:

Item	Month of July 1958	7 months ended with July 1958
Number of train accidents*	325	2,020
Number of accidents resulting in casualties	28	164
Number of casualties in train, train-service and nontrain accidents:		
Trespassers:		
Killed	99	389
Injured	90	375
Passengers on trains:		
(a) In train accidents*		
Killed	—	—
Injured	73	211
(b) In train service accidents		
Killed	—	5
Injured	84	686
Employees on duty:		
Killed	10	101
Injured	1,087	7,170
All other nontrespassers:**		
Killed	83	715
Injured	228	2,264
Total—All classes of persons:		
Killed	192	1,210
Injured	1,562	10,706

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former caused damage of more than $750 to railroad property. Only a minor part of the total accidents result in casualties to persons, as noted above.

**Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties for all classes of persons, including both trespassers and nontrespassers, were as follows:

Persons:		
Killed	84	690
Injured	175	1,699

Missiles by Rail?

NYC Develops Shock-Free Car for Delicate Weapons

The New York Central Technical Research Center in Cleveland has developed a new technique for shipping missiles by rail—shock-free. Previously, all such shipments have moved by air. Delicate missile control mechanisms require absolute protection from shocks en route.

The Central technique, which does not require alteration of the car, controls shocks by supporting the missile from all sides on rubberized pillows filled with air. The pillows absorb full shocks of starting and stopping as well as coupling impacts much greater than would occur in normal service. The inflatable pads are deflated for loading and unloading. With the pads deflated, the missile can be pulled from the car by a small industrial truck.

A. E. Perlman, NYC president, described the new technique as "an important milestone" in railroad progress. "New York Central," Mr. Perlman said, "is the first railroad to develop a method which can guarantee rail shipment of these sensitive missiles without damaging their delicate mechanism. The method we have developed actually gives the missiles more protection from shock than any method now in use."

Road tests were made by the Cleveland research scientists with a mock missile mounted in baggage car. (The technique can also be used with open-top equipment.) In these tests, the missile-car was shunted into standing cars at impact speeds up to 10 mph. This speed is much greater than the coupling speed in use in the Central's new electronic yard.

"These tests convinced us that the Central can transport these missiles with no damage to them," Mr. Perlman said. "But what makes us even happier is the fact that we can adapt this handling method to 11 types of sensitive instruments and machinery. The technique promises to open a whole new era for railroading."

Rail Net Income in August Sets New High for the Year

Net income of Class I railroads in August was estimated at $77,000,000—highest for any month so far in 1958. This compared with a net of $34,000,000 in July and $80,000,000 in August, 1957.

Estimated net income for the first eight months of the year was $278,000,000, compared with $475,000,000 in the corresponding period last year.

In the first eight months of 1958 operating revenues declined 12.5 per cent and operating expenses fell 9.6 per cent below those for the 1957 period.

The railroad rate of return, in the 12 months ended August, 1958, averaged 2.54 per cent. This compared with 3.69 per cent for the 12 months ended August, 1957.

Nickel Plate Wins Top Safety Award

Felix Hales (left), president of the Nickel Plate, accepts the Harriman Gold Medal Award for the best 1957 safety record among larger Class I railroads, from James G. Lyne, editor of Railway Age and chairman of the Harriman Awards Committee. Other Gold Medal winners were the Duluth, Missabe & Iron Range and the Bessemer & Lake Erie.

'Restrictive' Labor Rules Rapped

The Union Railroad (at Pittsburgh, Pa.) isn't mincing words in telling its employees why the present traffic outlook is none too good.

B. R. Gould, vice president and general manager, began a recent message to employees by pointing out that the Union is becoming "less and less important to Pittsburgh's steel industry." On-line mills, he said, turned out a greater tonnage in blast furnace and open hearth products in 1957 than they did in 1948. But during the same period, Union's tonnage dropped from 70,700,000 net tons in 1948 to 58,000,000 last year.

Why the decline in the face of rising production?

Basic changes in steelmaking, with certain improved mill procedures tend to reduce traffic. More foreign ore—richer in iron content—is being imported. Less limestone, less coking is required. Less ore is needed for each ingot or pig produced.

"Secondly, and much more important so far, there's truck competition, which has taken more and more of our tonnage each year. The trucks get the business for one reason only—poor productivity and high costs on this railroad . . . From 1939 to 1958 our crew productivity has dropped 25 per cent. Some of this loss of productivity may come from individual action, but I believe that most of it results from restrictive labor agreement rules. Inefficiency burdens us with unnecessarily high costs . . .

"I submit to each of you that there is no job security in this situation. If nothing is done to support management efforts to hold our tonnage, the figures clearly show where we are headed. On the other hand, with improved efficiency we can cut our costs and reverse the trend . . . This is the time—five years from now it will be too late."

Labor organization came late to the Union—1937, when the steel industry was organized. Now the railroad finds itself "hamstrung" by restrictive rules—particularly those pertaining to road- and yard-crew relationships—and thus far efforts to change those rules have been unsuccessful.

Trailer Train Flatcars To Get New ACF Hitches

All 400 of the piggyback flatcars recently ordered by Trailer Train Company (RA, Sept. 1, p. 27) will be equipped with two each of the retractable trailer hitches developed and built by the American Car and Foundry division of ACF Industries.

ACF said the order for 800 of the tie-down devices is the largest received by the company since they were introduced two years ago as a "simple and safe" method for securing trailers to flatcars.

'Eurailpass' Introduced in New York

ICC Chairman Howard Freas (second from right) joins representatives of three European railroads at New York reception introducing "Eurailpass," which will go on sale Jan 1. The pass offers U.S. and Canadian tourists two months' unlimited rail travel in 13 European countries for $125. Pictured, from the left, are Henry Pillichody, Swiss Federal Railways; Pierre Deshayes, French National Railroads; Mr. Freas; and Joachim Wenzel, Germany.

New York Ponders Perlman Offer

New York City is giving "serious study" to the New York Central's offer to turn over all of its passenger facilities within the city limits—including part of Grand Central Terminal—to the municipality.

The offer involves 5.2 miles of tracks, signaling equipment, stations and other facilities extending from the Harlem River Bridge to Grand Central. It also involves that portion of Grand Central devoted to commutation service. Not included are the railroad's freight tracks on the west side of Manhattan.

Under a proposal submitted to city officials at a two-hour meeting with Central executives, the railroad would continue to use the tracks for its long-haul passenger and out-of-town commutation business.

But maintenance and operation of the tracks and other facilities would be up to the city. One immediate result of such a plan would be an annual tax saving of $6,500,000 for the railroad.

NYC President Alfred E. Perlman first hinted at such a scheme when he told city authorities last July that the railroad might have to pull out of New York entirely if it got no relief from its city tax burdens. At that time he proposed that the city and the railroad share the line's tracks in and under Park Avenue—and their operating expenses.

It has now been suggested that the city tie its subway system to the Central's tracks—thus permitting direct commuter service to lower Manhattan. This would involve linking the Central's tracks at Grand Central to the IRT Lexington avenue subway line.

While the Transit Authority and Central tracks are the same gage, any such tie-up would require equipment and signal alterations. Existing Central passenger cars are too long to negotiate subway curves.

What are the plan's chances of success?

"We think it's workable," declared John F. Nash, NYC's vice-president—operations. But Chairman Charles L. Patterson of the Transit Authority took a more cautious view. "We've got to study the proposal to see how it would affect them and how it would affect us," he said.

In any case, no action will be forthcoming until a six-man team of engineers —three from the city, three from the railroad—have explored the proposal more thoroughly.

Mr. Perlman last week called on New York City business leaders to support the railroad's efforts to save commutation services. He specifically urged their support of (1) the plan for turning over passenger facilities to the city; and (2) the proposed creation of a State Office of Transportation with "power to reconcile the conflicting policies and actions of the different regulatory and taxing authorities."

He also asked them to see to it that candidates for public office maintain their concern over transportation problems "after election."

"Your full vigor must join with ours to demand a transportation policy which will keep our city healthy, prosperous and dynamic," Mr. Perlman told the annual luncheon of the Fifth Avenue Association.

Milwaukee Joins Ranks Of Flexi-Van Carriers

The Milwaukee is going into Flexi-Van operations, with a $1,022,000 equipment order and a Nov. 15 target date for inaugurating the service.

Initially, the road will offer a complete door-to-door transportation service between Chicago-Milwaukee and St. Paul, Minneapolis, Omaha and Kansas City. Later, expansion will take the operation through to the Pacific Northwest—Spokane, Seattle and Tacoma.

Milwaukee's equipment order (placed with Strick) includes 26 flatcars, 75 vans and 40 bogies.

Milwaukee-New York Central Flexi-Van interchange will provide for the first time a coast-to-coast Flexi-Van operation (when Milwaukee extends service into Washington).

Only other Flexi-Van entry to date in the West is the Burlington, which is acquiring 10 trailer bodies and bogies, but no special cars (RA, Aug. 11, p. 40).

ATA Protests Highway Rates Requested by Illinois Central

The American Trucking Associations has asked the ICC to deny an Illinois Central application for motor common carrier rates.

The ATA contends that IC "actually seeks authority to perform virtually unrestricted operations."

IC applied to the Commission in February for permission to operate as a common carrier of general commodities by motor vehicle among various points in Mississippi and Louisiana.

SS Act Amendments Boost Rail Retirement Payments

Some 280,000 beneficiaries under the Railroad Retirement Act will receive increases in benefit payments because of new amendments to the Social Security Act.

The amendments boost benefits payable under the SS old-age, survivor and disability insurance programs. But because of the social security minimum guaranty provision in the Railroad Retirement Act, annuities under the RRA will also be increased.

Under this provision, the railroad retirement law guarantees that in no case will monthly benefits payable to retired employees and their wives or to families of deceased employees be less than the amounts the social security system would pay if railroad employment were covered by that system.

Benefits payable to some railroad disability annuitants will also be affected by SS Act amendments.

People in the News

August W. Schell
B&O

Paul F. Robinson
D&H

BALTIMORE & OHIO.—August W. Schell, assistant to president, Baltimore, elected secretary of the B&O, succeeding **Roger S. B. Hartz,** who retired Sept. 30.

BURLINGTON.—C. E. Purvis appointed division storekeeper, Centralia, Ill., succeeding **N. E. Sands,** named local storekeeper, Clyde, Ill. Mr. Sands replaces **E. F. Molbeck,** promoted to assistant district storekeeper, Chicago (RA, Aug. 18, p. 38).

Harry G. Porter, engineer of capital expenditures, Chicago, retired August 31.

C. E. Birdsell, general agent, passenger department, St. Paul, Minn., appointed general passenger agent there, to succeed **W. R. Burgess,** who retired August 31. **Albert E. Stevens,** city passenger agent, St. Paul, named to replace Mr. Birdsell.

CAROLINA & NORTHWESTERN.—Spencer M. Percival appointed general superintendent, Hickory, N.C. Abolished office of vice president, Charlotte, N.C., formerly held by Mr. Percival.

CHICAGO GREAT WESTERN.—L. O. Grashoff elected secretary-comptroller, Oelwein, Ia., to succeed **G. T. Scott,** vice-president-secretary, who retired August 31.

H. R. Halverson, superintendent, Oelwein, Ia., retired September 1. **J. C. Dodd** and **H. A. Peterson** named superintendents, Eastern division and Minnesota division, respectively, with headquarters at Oelwein. **C. B. Angelo** appointed terminal superintendent, Twin Cities Area, St. Paul.

DELAWARE & HUDSON.—H. J. Wilson, general accountant, New York, appointed assistant to comptroller.

Paul F. Robinson, assistant vice president—traffic, elected vice president in charge of traffic, Albany, N.Y., succeeding **Max V. Beckstedt,** who retired October 1. Abolished Mr. Robinson's former position.

DEPARTMENT OF THE NAVY.—Captain Edward F. Metzger, assistant chief, Bureau of Supplies and Accounts for Transportation, has been promoted to Rear Admiral.

ELGIN, JOLIET & EASTERN.—Paul H. Verd, general manager, Chicago, promoted to vice president—personnel there, succeeding **Franklin A. Fitzpatrick,** elected vice president.

FLORIDA EAST COAST.—W. H. Barrett, auditor of passenger accounts, St. Augustine, Fla., retired August 31. **I. H. Cooper,** auditor of freight accounts, named auditor of freight and passenger accounts.

GULF, MOBILE & OHIO.—F. H. Bowers, general freight agent—divisions, Mobile, Ala., appointed assistant freight traffic manager there. **A. K. Wente** named assistant general freight agent, succeeding **R. L. Lanigan,** promoted to general freight agent.

William Jackson Edwards, III, formerly with the law firm of Hamilton, Denniston, Butler & Riddick, Mobile, Ala., appointed an attorney of the GM&O at that point.

JACKSONVILLE TERMINAL.—R. W. Blackburn, secretary-treasurer, retired September 1. **J. C. Baxley,** comptroller, elected treasurer and his title will be comptroller-treasurer. **L. C. Tooke** elected secretary and his title will be secretary-assistant to comptroller. **Joffre Brigman** appointed assistant secretary and assistant treasurer and his title will be assistant general manager and assistant secretary-assistant treasurer.

KANSAS CITY SOUTHERN.—Eldon D. Pence appointed assistant freight traffic manager, Shreveport, La., succeeding **Frank A. Key, Jr.,** who retired August 31. **Felton L. Colvin,** general agent, Atlanta, Ga., named district freight agent there, and his former position abolished. **George J. Simcik** appointed general agent, Omaha, Neb., to replace **L. L. Kratville,** who retired August 31.

LONG ISLAND.—B. O. Hegewisch, foreman of telephones and telegraph, appointed engineer of communications, succeeding the late **A. J. Stokum.**

MILWAUKEE.—R. T. McSweeney, oriental traffic manager, Chicago, appointed foreign freight traffic manager there. The following named foreign freight agents: **W. F. Findley,** Seattle; **W. S. McKee,** Chicago; **E. J. Murphy,** New York.

NEW HAVEN.—Joseph D. Rogers, superintendent of communications, retired. **Roger F. Pownall,** superintendent electric transmission, now has charge of communications with title of superintendent electric transmission and communication. **William A. Ford,** chief signal officer, retired. **Edgar B. Walkup,** signal engineer, now heads the signal department.

John T. Looby, general tax accountant, appointed head of the tax department and **George H. Webster,** tax agent, named assistant head.

NICKEL PLATE.—David J. White, division engineer, Fort Wayne-Chicago divisions at Fort Wayne, Ind., transferred to the Wheeling & Lake Erie district at Brewster, Ohio, succeeding the late **Floyd A. Poling. Robert C. Turnbell,** assistant engineer, Cleveland, succeeds Mr. White at Fort Wayne.

J. C. Jones, general agent, Minneapolis, Minn., transferred to Detroit, Mich., succeeding **J. T. Grant,** named general freight agent at New York. **W. D. Nelson,** traffic representative, Kansas City, Mo., appointed general agent, Davenport, Iowa, succeeding **H. A. Gilmore,** who replaces Mr. Jones at Minneapolis.

SOUTHERN.—Charles W. Gowl, freight traffic manager, Cincinnati, promoted to assistant vice president, Washington, D. C., effective October 1, succeeding **Robert N. Woodall,** who has joined the **Norfolk & Western** as a vice president (RA, Sept. 8, p.77). **Clyde C. Cox,** eastern traffic manager, New York, succeeds Mr. Gowl at Cincinnati. **Herbert E. Wilson, Jr.,** general eastern freight agent, promoted to eastern traffic manager, succeeding Mr. Cox. **Challen H. Caskie,** district freight agent, Birmingham, Ala., succeeds Mr. Wilson. **Glennon F. Weisbrod,** commercial agent, Birmingham, succeeds Mr. Caskie.

VIRGINIAN.—E. E. McConnehey, assistant secretary and assistant treasurer, retired September 30. **L. W. Powers** appointed assistant secretary and assistant treasurer and tax and insurance agent.

Royce A. Cornell appointed general agent, Charleston, W. Va., succeeding **Charles L. Outen,** who retired September 30.

WESTERN PACIFIC.—H. Cushman Dow, attorney, San Francisco, appointed general attorney, to succeed **Elzo L. Van Dellen,** promoted (RA, Sept. 22, p. 38).

OBITUARY

P. F. Gault, 70, retired attorney of the **Chicago & North Western,** died September 20 in a nursing home at Elgin, Ill.

Dwight E. Perrine, 57, assistant chief engineer, **Chicago & Western Indiana—Belt Railway of Chicago,** died September 21 in South Shore Hospital, Chicago.

O. A. Donagan, 75, who retired in December 1950 as general storekeeper of the **Boston & Maine, Maine Central** and **Portland Terminal** at Boston, died Sept. 11.

Alfred S. Kline, 62, chief special agent, **Missouri Pacific,** St. Louis, died Sept. 21 in Missouri Pacific Hospital there.

Supply Trade

J. W. Werrell, district manager, appointed application manager, **Primary Battery Division, Thomas A. Edison Industries of McGraw-Edison Company,** Bloomfield, N.J.

Seymour Becker has been appointed field representative for the **Arcair Company** in the New England states.

Elmer E. Burk has been appointed general manager of **Buffalo Brake Beam Company** at Lackawanna, N.Y. Mr. Burk was formerly manager of the Foundry Division of Acme Steel & Malleable Iron Works Division of Buffalo Brake Beam Company.

Bransford W. Crenshaw, vice president, **Scullin Steel Company Division of Universal Marion Corporation,** Chicago, will be in charge of all railroad sales at that point, succeeding **Robert C. Geekie,** resigned. **Robert A. K. Smith** has been appointed district sales manager, St. Louis.

Edgar K. Lofton has been appointed field engineer to service railway accounts in the eastern U.S. for **SKF Industries, Inc.**

K W Battery Company, Skokie, Ill., has announced the appointment of **William T. Bardouski** as sales representative in the western Illinois and eastern Iowa area.

S. A. Thompson, railroad sales manager of **Sperry Rail Service,** Division of Sperry Products, Inc., resigned to become director and vice president of **Thomson-Manning Corporation** of Lynn, Mass., a new corporation which will offer railwelding service and other railroad products. Mr. Thompson's duties and responsibilities have been assigned to **L. C. Morris,** assistant sales manager.

Elmer E. Burk

S. A. Thompson

You Ought To Know...

C&O's new coal-loading dock at Toledo, Ohio—capable of handling 6,000 tons of coal an hour from railroad cars into ships—has gone into full-time operation following tests that began in August. The $7,000,000 mechanical shiploader is claimed to be the largest and fastest in the world. C&O designed the loader to handle the largest lake boats as well as ocean-going ships that will use the St. Lawrence Seaway.

Passengers may, in fact, be deserting the railroads—but that generality doesn't apply to the Rio Grande's narrow-gage "Silverton." The little train chalked up new records for passengers carried and revenue earned during its 93-trip 1958 season. The figures: 31,984 passengers, for an average of 344 per trip (against 24,699 passengers and a 305 average in 81 trips last year). The train took in some $125,000 this year—from ticket sales alone. That's equal to about $14.50 per train-mile. All of which explains Rio Grande's description of the train's performance: "Fabulous."

Grand Trunk Western intends to provide that which is needed where passenger service is concerned. Francis A. Gaffney, vice president and general manager, put it this way recently in addressing the Flint, Mich., Traffic Club: "It is still our aim to provide the best possible transportation where it is needed, but we must revise our services to meet actual requirements, saving money and doing a better job in the process."

Chicago, Aurora & Elgin has decided against trying to go out of business. The line dropped passenger service in July 1957, had a petition before the Illinois Commerce Commission to abandon freight operations, too. A new management, after studying the situation, has decided against such drastic action and is asking the commission to dismiss the abandonment request.

No protest will come from El Dorado, Kan., over the proposed discontinuance of the town's last passenger train by the Santa Fe. A Chamber of Commerce statement indicates that the town is willing to trade the train for continued good service of other types. "The town of El Dorado long has regarded the Santa Fe as a true industrial friend," the statement said. "Its [the town's] action today represents only that of a friend doing as he would wish to be done by."

►Discontinuance of passenger train service on its 57-mile line between Brunswick and Bath "is necessary because its operation is costing the Maine Central Railroad an annual loss of $400,000," according to E. Spencer Miller, president of the road. Mr. Miller said the service on the branch necessitates paying out $3.47 for each passenger dollar taken in.

Pacific Great Eastern's new line into the Peace River country was officially opened Sept. 30, with an inaugural run from Vancouver, B.C., north to Fort St. John. A number of U.S. and Canadian railroad officers were on hand for the ceremonies. The line extension, an $80,000,000 project, gives PGE some 800 route miles—and further expansion to the north is reported under study.

The transportation outlook for 1959 will be the theme of the 22nd annual meeting of the National Association of Shippers Advisory Boards Oct. 7-9 at the Penn-Sheraton Hotel in Pittsburgh, Pa. Speakers will include AAR President Daniel P. Loomis, AAR Vice President—Operations and Maintenance Richard G. May, and James H. Land, of Pittsburgh, senior vice president of the Mellon National Bank and Trust Co.

A new passenger station in Grand Rapids, Mich., began operations Sept. 28. The modernistic C&O terminal, used by 10 trains daily, replaces a 58-year old Union Station which occupied a site needed for expressway construction. Among the features of the new facility: a lighted parking lot with space for 400 cars—and free overnight parking for patrons.

PRR gave Pittsburgh, Pa., a handsome 200th birthday present last week: an original painting, executed by artist William Charles Libby of the Carnegie Institute of Technology, depicting the birth of the city.

Sen. George A. Smathers (D. Fla.) says he has received assurances from the Pennsylvania, Atlantic Coast Line, Seaboard and Southern that they will not discontinue their through Pullman service to Florida (RA, Sept. 22, p. 7).

Fourth-quarter carloadings for 1958 will just about match 1957 figures, according to the estimates made by the Mid-West Shippers Advisory Board. Big gainers: grain and ore and concentrates. Big losers: iron and steel, vehicle parts, machinery and boilers. The board forecasts loadings totaling 841,608 cars, down about 1.1 per cent from '57 figures.

The Milwaukee has juggled its Chicago-Omaha sleeping car service to give passengers a better break time-wise. The car (8 duplex roomettes, 6 roomettes, 4 double bedrooms) formerly operated in the "Arrow" will now go westbound in the "City of Los Angeles," eastbound in the "City of Denver." The switch leaves arrival-occupancy times practically unchanged, but gives passengers 55 minutes later departure from Omaha.

B&O opened a new local freight classification yard and engine servicing facility in Columbus, Ohio, last week—first phase of a $2,000,000, delocation program to make room for improvements to U.S. Route 23 in the downtown area.

Rail connections to northern Mexico were cut when a cloudburst washed out some 1,000 ft of Santa Fe track near Presidio, Tex. The Rio Grande River, normally four ft deep at Presidio, rose to more than 17 ft at the height of the flood.

C&O will recall 200 maintenance of way and equipment employees by Dec. 31, will bring an additional 400 men back to work soon after Jan. 1. Another optimistic note from the Chessie: the railroad has located 60 new plants on-line so far this year. They'll produce estimated annual revenues of $3,200,000.

New ICC Commissioner Charles A. Webb took his oath of office in Washington last week. He received an interim appointment to fill the unexpired term of Robert W. Minor, who quit the commission to become a New York Central vice president (RA, Sept. 15, p. 7).

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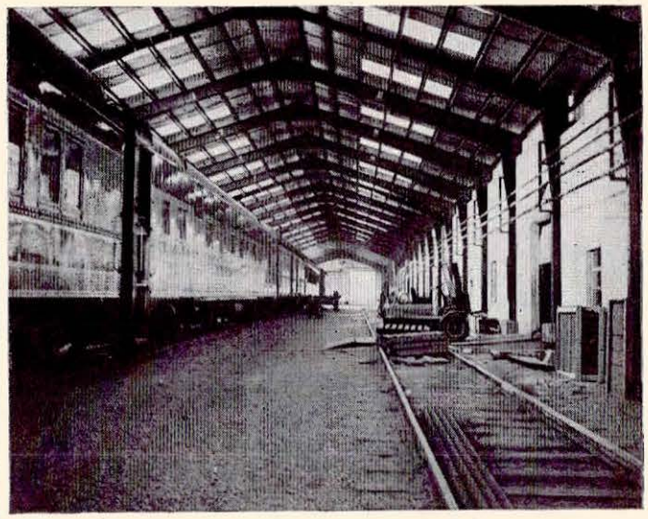

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How to Fool Mr. Khrushchev

Examiner Howard Hosmer's proposed report on the state of railroad passenger service is, in substance, little short of an indictment for murder. He does not characterize it as such. He lets the facts speak for themselves.

But the victim isn't dead yet. He might still be rescued—if his assailant were pulled off. Mr. Hosmer doesn't believe that will happen. He thinks railroad passenger service will expire within the next ten years.

Government—federal, state and local—is the assassin. It is exercising its limitless power to transfer travel from rail to highway and air. Railroad passenger-miles in 1947 were 47 billion. In 1956 the total dropped to 28.5 billion. Private automobile passenger-miles in the same period rose from 273 billion to 618 billion. Air travel rose from 6 billion passenger-miles to 25.5 billion. The diversion of travel away from the railroads was even more severe in 1957 and in the first five months of 1958. Here are some of the factors Mr. Hosmer cited—which government has put to work to induce traffic diversion from the rails:

From 1921 to 1956, $111 billion of public funds were expended on highways—and *users of highways paid only 44 per cent of this total.* More than half of this enormous sum was poured out in the 1947-56 decade—which, of course, is the reason why the situation of the railroads has recently become so acute.

Federal outlay on air navigation facilities 1925-1958 totaled $1.6 billion—85 per cent of it since the end of the war. The government is getting ready to spend additional hundreds of millions for air traffic control. Air mail service has been subsidized to the tune of $441 million. The investment in civil airports up to the end of 1955 was $4 billion, most of it contributed by municipalities.

Railroad terminals, of course, are provided and maintained by private capital and are heavily taxed besides. The New York Central provided Toledo with a new passenger station at a cost of almost $5 million—on which it pays $43,000 a year in taxes. Toledo, meantime, built an airport at a cost to the taxpayers of almost $4 million. The Great Northern in 1956 paid $2,241 in taxes to support the airport at Cut Bank, Mont. The airline which uses the airport commercially paid less than $23 in taxes at Cut Bank in the same year.

"The railroads are defenseless against the tax assessors who seemingly are bent on killing the goose that laid the golden egg," Mr. Hosmer observes.

Besides doing all it can to drive the railroads to death by taxation, while heaping billions in gifts on highway and air transportation—government goes a step further and does what it can to inflict higher labor costs on the railroads. No less than 16 states have so-called "full crew" (really "excess crew") laws.

Witnesses from the armed services tell how essential railroad passenger service will be in the event of war—but they are doing nothing to enable the railroads to be ready for such an emergency. Mr. Khrushchev will derive much pleasure from this report of Examiner Hosmer's. As long as government in the U.S. operates contrary to the national economic welfare and military safety—in dealing with transportation—Mr. K. can hope to attain his ambition of world dominion without having to fight for it.

BAD ENOUGH TO BE GOOD: We do not share Examiner Hosmer's pessimism about the future of railroad passenger business. A business which can survive the kind of treatment railroad passenger service has sustained shows it has a lot of built-in vitality. When conditions become as ludicrously indefensible as they are now, it usually is easier to arouse public interest in correcting them. Railroad people and their friends should widely publicize and actively campaign against the adverse factors Mr. Hosmer outlines. Such action will be good for America, good for the railroads, and bad news for Moscow.

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The relative heat of EVERY bearing on this fast freight is now a matter of record... a record which pinpoints the location of ANY overheated, potentially dangerous journal boxes.

By this stitch-in-time early warning, your road can prevent hot boxes from causing serious damage... can detect overheated bearings before they become hot boxes.

Now in operation on ten major railroads, SERVOSAFE Systems are making tangible savings by reducing repair costs of journals and bearings, by minimizing inspection time at terminals, interchanges and interim inspection points. Set-off time and car shopping for major repairs are held to a minimum.

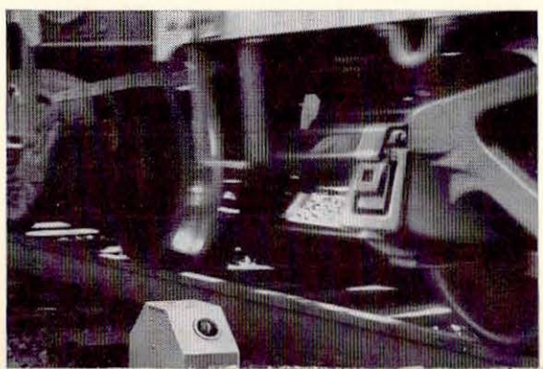
In addition to direct savings these systems insure protection for bridges, structures, CTC, interlockings, and for the consist itself.

SERVOSAFE Hot Box Detective Systems have thoroughly demonstrated their reliability—in total darkness or noonday sun—unhampered by rain, dust, fog, or smoke—in January or July.

Our engineers will give you facts and figures... so that you can evaluate the economic significance of SERVOSAFE Systems for your road. Write: **Railroad Product Sales**

SERVO CORPORATION OF AMERICA
20-16 Jericho Turnpike • New Hyde Park, L. I., N. Y.

*U. S. and foreign patents applied for

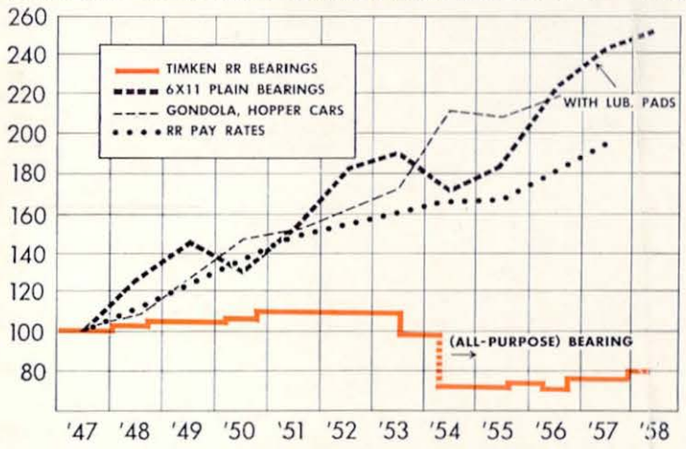


A plan to save the railroads $288,000,000 a year can START RIGHT NOW!

1 PLANNED PROGRAM WILL MAKE "ROLLER FREIGHT" EVEN MORE PRACTICAL—When all freight cars roll on roller bearings America's railroads will save an estimated $288,000,000 a year*—or $144 per car. Here's one way the railroads can start working toward that goal right now—with a planned program for equipping all cars with roller bearings.

Every railroad might agree to put a certain number of cars on roller bearings every year. It would speed the day when all freight is "Roller Freight"—when the biggest savings can be realized. The railroads would get greater immediate benefits because they'd get back about as many cars as they put into interchange. And a planned program would help the railroads set economical shop schedules to reduce the cost of converting existing rolling stock. It would enable us to *plan* roller bearing production—automatically keeping the cost at a minimum.

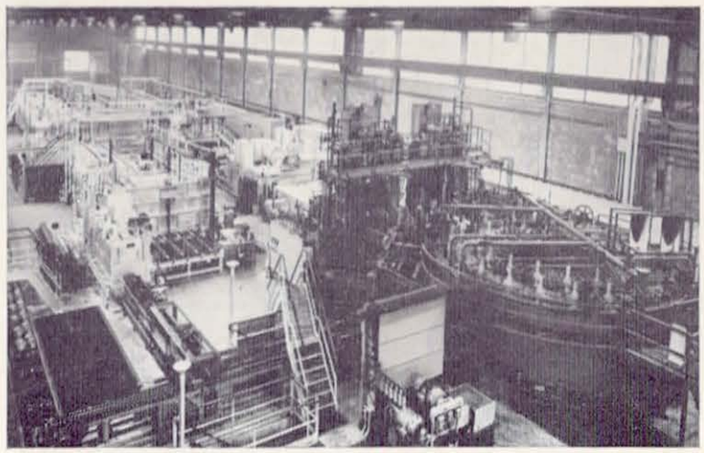
TIMKEN BEARING COSTS HAVE STAYED DOWN WHILE OTHER RAILROAD COSTS HAVE SKYROCKETED (INDEX 1947 = 100)



SOURCES: AMERICAN RAILWAY CAR INSTITUTE • INDEX FROM AAR—ICC STUDY • AAR INTERCHANGE RULES

2 $7,000,000 PLANT WILL KEEP COST OF GOING "ROLLER FREIGHT" DOWN—Our new Columbus, Ohio, plant (see photo) uses revolutionary production methods to produce up to 20,000 car sets a year—keep bearing costs down.

This unique plant is designed for a planned "Roller Freight" program . . . to make "Roller Freight" an even better buy. Right now the extra cost of equipping a freight car with Timken® roller bearings is almost 50% less than it was only 10 years ago. Meanwhile, the cost of friction bearings and other railroad purchases has been climbing (see chart). The price gap between Timken roller bearings and friction bearings has been greatly narrowed and use of this plant can help close this gap even more.



View of ultra-modern machinery that can hold railroad roller bearing costs down.

3 IMPROVED FREIGHT CARS WILL GET THE RAILROADS MORE BUSINESS—With more "Roller Freight" cars, you'll be able to get more business by *guaranteeing* faster, more dependable shipping. Timken tapered roller bearings end the No. 1 cause of freight train delays—the hot box problem. One railroad's cars on Timken bearings have rolled over 300,000,000 car-miles with only one over-heated bearing. That's because Timken bearings *roll* the load, don't slide it. Each car on Timken bearings means eight fewer potential hot boxes to worry about. And they cut terminal bearing inspection time. Each car on Timken "AP" bearings produced in our new plant will go at least three years without adding lubricant.

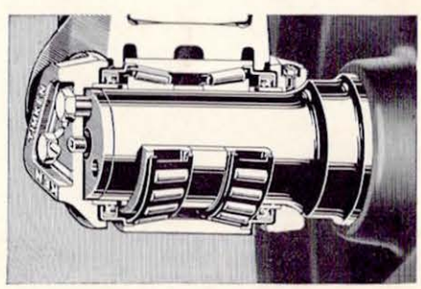
Already 69 railroads and other freight car owners have over 25,800 cars on Timken bearings—⅔ of them in interchange. Why not talk to other railroaders about planned conversion of existing rolling stock and equipping of new cars with roller bearings? Why not make use of your new railroad roller bearing plant? The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".

**1958 revision of estimated total annual savings from an Economic Study of "Roller Freight" made by The Timken Roller Bearing Company. The study combines statistics furnished by the Association of American Railroads, the Interstate Commerce Commission, the University of Illinois and individual railroads.*

TIMKEN

TRADE-MARK REG. U.S. PAT. OFF.

TAPERED ROLLER BEARINGS



"Roller Freight" is the next great step in railroading